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THE MODERN TREATMENT OF PNEUMONIA*

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A comprehensive discussion of the treatment of pneumonia in the brief period allotted to me is obviously impossible. Only passing mention of certain aspects of the subject will therefore be made, with more concentrated attention given to other, less commonly understood phases of the problem. To facilitate the discussion, I have divided the subject into four principal parts: general measures; medications; specific therapy; and special methods of treatment.

General Measures

The first problem with which one is confronted when called upon to see a patient with pneumonia is that of hospitalization. The objection to moving such a patient is an almost universal one among physicians. It would seem, however, that with our modern methods of transportation, the advantages offered by the hospital, viz., nursing care, oxygen, serum therapy, far outweigh the disadvantages or potential dangers of moving the patient. This is particularly true in the early stages of the disease. On the other hand, if all of the above facilities are available in the home, hospitalization should not be necessary.

A second matter of paramount importance is that of nursing care. The significance of this in pneumonia cannot be overestimated. In this, probably more than in any other disease, good nursing judgment is essential. The key to satisfactory nursing care is probably best expressed in the one word rest. It should be the duty of the nurse to see to it that the patient does nothing

for himself, in order that his energy may be conserved. For this, full time attendance by a nurse is desirable if at all possible, but even the part time attendance afforded by such agencies as the Visiting Nurses Association, Metropolitan Life Insurance Company, et cetera, has proved itself to be of distinct value.

The diet should be a liquid one and fed by the nurse until the patient is definitely convalescent. Inasmuch as the disease is of relatively brief duration, the maintenance of an adequate caloric intake is not of major importance. An abundance of fluids, however (at least 3,000 c.c. per day), is necessary. Iced liquids should be avoided. If the oral intake of fluids is inadequate, then either intravenous or subcutaneous administration should be resorted to. The former is less painful to the patient, but must be given very slowly with a small needle. Too rapid injection of large volumes of fluid in the vein increases the venous pressure with a resulting overburdening of the right side of the heart.

Another matter requiring careful attention is that of the bowels. In the early stages, a laxative should be ordered, and a daily soda or glycerine enema thereafter.

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Abdominal distention should be combated with use of enemas, rectal tube, stupes, or pituitrin.

Medications

Morphine—Codeine.—The severe pleural pain which so frequently accompanies pneumonia, with its resultant respiratory embarrassment and physical exhaustion, calls for the free use of codeine and, in extreme cases, of morphine. Several objections to the latter are recognized and should limit its use to only the most severe cases. In the first place morphine increases abdominal distention and depresses respiration—effects which should be avoided for obvious reasons. Recent studies have¹ shown that this drug increases cyanosis and will also diminish the oxygen saturation of the arterial blood. Lastly, too much morphine is undesirable because it may totally abolish the cough reflex and thus favor pulmonary atelectasis by plugging of the bronchus with retained secretions. On the other hand, if codeine in combination with the usual analgesics such as aspirin, does not relieve the patient's pain one should not hesitate to use morphine. For restlessness and sleeplessness, bromides or one of the milder barbiturates such as phenobarbitol, are of value.

Digitalis.—The value of digitalis in the treatment of pneumonia is still a debated subject. In a small series of cases reviewed by Burrage and White⁴ only about one third were found to be fully digitalized, but of this number, only 10 per cent died. In contrast to this, the mortality of the remaining, inadequately treated cases was 56 per cent. The authors concluded from this analysis, that if given in full digitalization doses, digitalis is of benefit in the treatment of pneumonia.

In a much larger series of cases (1,450) from the Rockefeller Institute, Cohn and Lewis⁶ concluded that digitalis did not influence the course of the disease itself, but admitted its value in cases wherein auricular fibrillation or auricular flutter had developed. Christian⁵ is of this same opinion.

In a recent study of 835 cases at the Bellevue Hospital (New York), Niles and Wyckoff¹⁰ found the mortality to be higher in the treated group than it was in those who did not receive digitalis. From their studies, they concluded that the routine use of this drug in pneumonia was not justified.

From this brief review of the literature it would seem that the evidence is against rather than in favor of the use of digitalis in pneumonia. In the presence of frank cardiac failure, auricular fibrillation, or auricular flutter, complete digitalization of the patient is indicated.

Quinine.—A discussion of therapy in pneumonia would hardly seem complete without some mention of quinine. There is probably no drug which enjoys such universal use in the treatment of this disease. If given very early there is some evidence that the pneumonia may be "aborted." German literature offers the most optimistic reports, but those of this country have not been so promising. While it is true that quinine is highly bactericidal for the pneumococcus in vitro, there is no proof that it has this action in the human body. While its advocates recommend large doses without regard for the resulting cinchonism, we should all do well to take into consideration the toxic effects which this drug has upon the heart, before we subject it to indiscriminate usage.

Stimulants.—In pneumonia, as in all diseases, there is occasional need for "stimulation." The drugs which have been commonly used in the past are caffeine and camphor. While both have enjoyed wide usage as cardiac stimulants, there is probably no scientific basis for this action. Certainly the cerebral stimulation which they afford is not necessary in pneumonia.

Two other drugs which have been used are strychnine and pituitrin. Warfield¹¹ has recently advocated the former in 1/20 to 1/10 gr. doses, on the assumption that it might reestablish the vaso-motor tone which is thought to be lost in this disease. Any drug which would accomplish this effect is deserving of extensive trial. Pituitrin also promises to fulfill this action and there is limited evidence that when given periodically over the day it may exert a beneficial effect in overcoming some of the peripheral circulatory failure which often accompanies this disease.

Potassium Permanganate.—I include this drug only to point out that it does not occupy a secure place in the armamentarium against pneumonia. There is only inadequate scientific evidence for its value in treating this disease.

Stimulants to the Leukopoietic System.—

A suppression of leukopoietic activity as evidenced by a low white count, is usually a bad omen. In a study of 1,220 cases of pneumonia at the Detroit Receiving Hospital 9 per cent (107) were found to have a leukocyte count under 7,000. Of this number 71 per cent died. This is in contrast to a mortality of 49 per cent among those patients whose white blood count was over this value. This, therefore, would seem to offer a very definite problem in the care of the pneumonia patient. Pentnucleotide has had only limited use in such cases, but the results have been promising. Given in doses of 10 c.c. intramuscularly twice a day, it has been observed to raise the leukocyte count to an appreciable degree in several instances. More extensive use of this or similar preparations should be made in an attempt to combat this complication. The advisability of routine blood counts with frequent "checks" cannot be overemphasized.

Specific Therapy

Of the various types of specific therapy which are now in use, it would appear that the one meeting with the widest acceptance at the present time is the use of specific anti-pneumococcus serum prepared according to the method of Felton. In the past there have been two principal deterrents to its wider use. The first of these is the cost of the serum—an objection which will never be removed until the demand for it increases. In consideration of this objection it would be well to point out that the use of serum effects a saving in duration of hospitalization, and that this might well be deducted from the total cost of the serum. During the past two years in Detroit this saving amounted to an average of 2.9 days per patient. The second barrier to a more widespread use of this preparation has been the time and delay involved in the older methods of pneumococcus typing for diagnostic purposes. Fortunately, this latter difficulty has now been largely overcome by the perfection of a method originally devised by Neufeld. The principle involved in this method is based upon the fact that when pneumococci are brought in contact with an homologous type of rabbit pneumococcus antiserum, there occurs, in a very

short time a swelling ("quellung" of the Germans) or ballooning, of the capsule of the pneumococcus. This reaction is highly type specific. By means of this new method the sputum may be typed in not longer than thirty minutes after it reaches the laboratory. Fresh specimens should always be obtained for this purpose.

The selection of patients for serum therapy is based upon three criteria. In the first place, the type of pneumococcus must be one for which a therapeutic serum is available. At the present time commercial antisera may be had for types I, II, V, VII, and VIII. Of these, type I is the most effective. Other type sera, such as type XIV have also been prepared, but there is insufficient evidence as yet of their potency. The second criterium for the selection of patients for serum is the duration of the disease. This should not be longer than ninety-six hours, seventy-two hours or less being desirable. I am told that in one eastern clinic this time limit has been recently extended to five days in type I cases. This would certainly seem worthy of trial in the presence of a bacteremia or in patients who are otherwise critically ill. The third factor is the age of the patient. Children between the ages of two and twelve usually do well without serum, and the danger of horse serum sensitization would hardly seem justifiable. Under two years of age the type of pneumococcus found is usually not suitable for serum therapy. At the other extreme of life, the age limit has been placed at sixty-five by most clinics particularly in type II infections. Patients beyond this age with type II infections rarely do well with anti-pneumococcus serum.

Contraindications.—Only two contraindications to serum therapy are recognized. The first is a state of shock, pulmonary edema or extensive cardiac disease. The second is an allergic history in the patient, indicated by a history of asthma, hay fever, urticaria, angioneurotic edema or eczema. A previous injection of horse serum or a positive skin test also indicate an allergic background and, unless desensitization can be accomplished, should constitute definite contraindications to the use of serum.

Recognition of sensitivity to horse serum is accomplished in one of two ways, viz., by the injection of 1/10 c.c. horse serum

(1-10 dilution) intracutaneously into the ventral surface of the forearm, or by the instillation of one drop into the conjunctival sac of either eye. A positive reaction is indicated by a wheal with a surrounding erythema in the arm test, and an hyperemia with edema and lacrimation in the conjunctiva. With a negative reaction the serum administration may be proceeded with; with only a moderate skin reaction, the patient must be desensitized with small, subcutaneous and intramuscular injections. With a marked skin test or positive conjunctival reaction, serum should not be used.

Administration of Serum: Technic.—With the patient properly selected the administration of serum should be begun immediately. Unnecessary delay must be avoided, inasmuch as a few hours may decide the ultimate outcome of the case at hand. The serum should always be given intravenously unless this is technically impossible or unless the patient is to be desensitized. It may be given directly, without dilution or with varying quantities of normal salt solution. In the former method, only a drop is introduced into the vein, this being slowly and carefully repeated until a few tenths of a c.c. are injected. If no reaction ensues, the continuous administration of the rest of the first dose may then be proceeded with. When diluted, the serum is added to about 200-250 c.c. of warm saline and the whole solution then given very slowly with a small needle. The rate should not exceed 1 c.c. per minute on the basis of the amount of concentrated serum present. Having completed the injection, the patient is observed for a period of 30 minutes for any possible reaction. A syringe containing 1 c.c. of 1:1000 adrenalin should always be at the bedside in the event that an anaphylactic reaction occurs.

Dosage.—The dosage employed varies somewhat with the type of pneumococcus involved and also with the duration of illness. Type II infections usually require more than type I, and cases treated at the 96 hour limit, more than those treated earlier. The usual dose for type I cases is from 80,000 to 120,000 units; type II and VII—160,000 units. Patients with a bacteremia usually require the maximum dosage. It is doubtful whether amounts totalling over 200,000 units have any ad-

ditional therapeutic value, and the use of such quantities is therefore not generally recommended.

It is generally agreed by all that large doses should be given during the first 18 to 24 hours. We have started each patient with 40,000 units and then given 20,000 units every four to six hours. One should not be deceived by a sudden drop in the temperature following the first or even the second dose of serum. A subsequent rise in temperature will usually occur if more serum is not given in four to six hours!

Serum Reactions.—Following the administration of the serum any one of three different reactions may develop. The first of these, the *anaphylactic reaction*, has already been alluded to. This is characterized clinically by wheezing, substernal oppression, cyanosis, et cetera, and usually occurs immediately after the injection is started. It calls for the immediate cessation of serum and the administration of adrenalin at once. The serum should not be attempted again! The second is a *thermal reaction*, which occurs in three-fourths to one and one-half hours after the serum is given. It is characterized by a temperature elevation and chill. Treatment is symptomatic. Adrenalin here is of no value. In the third type known as *serum sickness*, the clinical manifestation of urticaria, arthralgias, adenopathy do not appear until four to ten days after the serum has been given. The treatment is symptomatic with adrenalin and lotions for the urticaria.

Clinical Results.—The most striking symptomatic effect of serum therapy is the decrease in toxicity. This becomes apparent in four to six hours after treatment is started, and is usually more apparent in type I infections. In addition to this, a clearing of the mental state is observed with frequent relief of dyspnoea and lessening of cyanosis. Pleural pain, cough and abdominal distention are not affected.

The temperature effect is dramatic in many instances. A drop of from four degrees to six degrees in four hours is frequently observed. The effect in type II infections is usually less striking. The pulse and respiratory rate follow the temperature closely, the latter being the last to drop in most cases.

The mortality is decreased by at least 50

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TABLE I. MORTALITY FIGURES

Type	Number of cases	Mortality Untreated	Mortality Treated	Reduction in Mortality	Lives Saved per 100
I	98	41%	18%	56%	23
II	99	47%	30%	24%	11

per cent in most cases of type I infections, and by 20 to 25 per cent in type II cases. The latter figure has been somewhat variable in different clinics, but with potent serum, the results justify its use. The accompanying table shows the mortality figures in the city of Detroit during the year 1935-1936.

Huntoon's Antibody Solution

This is a solution of pneumococcus antibodies in physiologic salt solution. It is prepared by precipitating out the antibodies from anti-pneumococcus horse serum, and then redissolving them in saline solution. By means of this procedure most of the horse serum proteins are removed, and the dangers of serum sensitization thereby largely eliminated. In the earlier years of its use, however, severe rigors followed its administration. It is claimed that with the more recent product these chill-producing substances have been removed. I have observed the effect of this preparation in only a limited number of cases. While the ultimate results were favorable, severe reactions were encountered in several instances.

Pneumococcus Serum With the Heterophile Antibodies

I have had no experience with this product and I include it only for the sake of completion. The virtue of the combination of heterophile antibodies with the usual protective antibodies which this preparation represents has been seriously questioned by several investigators⁸ during the past year. Suffice it to say, that clinical trial has as yet not been adequate to draw any final conclusions about it.

Pneumococcus Vaccines and Immunogens

There have been several enthusiastic supporters of the use of vaccine in pneumonia.

Barach² was able to show experimentally that immunity could be produced in mice and rabbits by injecting type specific vaccines. This immunity occurred on the third day and increased markedly to the fifth day. Similar results were obtained with bacterial filtrates made from specific types of pneumococci. Lambert⁹ reported on the use of vaccines in 474 patients with an equal number of controls. The preparation used contained mixed pneumococci, influenza bacilli, streptococci and micrococcus catarrhalis, and was given intramuscularly every six hours. In this series of cases, there resulted a mortality of 24 per cent in contrast to 44 per cent in the control group. While these figures seem striking it is nevertheless difficult to understand the logic of this form of therapy. It would seem that the abundance of infection present in the lung of the patient would constitute an adequate stimulus to antibody formation without the added aid of vaccine.

With immunogens I have had only a very limited experience but the objections to its use would seem to be the same as for vaccines. Pneumonia is a relatively short-lived disease and its specific treatment should consist of the administration of passive immunity rather than depending on the body to establish an active immunity.

Special Methods

Oxygen Therapy.—The value of oxygen in the treatment of pneumonia is now an established fact. One need only observe the comforting effect of the oxygen tent on the patient to realize the valuable part which it plays in the treatment of this disease. There is also definite scientific evidence for the need of oxygen in pneumonia. At some time during its course, the oxygen concentration in the arterial blood falls below normal. This fall in oxygen concentration, or "anoxemia,"

is roughly parallel to the intensity of the cyanosis observed in the lips or nail beds. The degree of cyanosis, therefore, constitutes the best clinical guide for the institution of oxygen therapy.

Three methods for administering oxygen are in general use, viz., funnel, nasal catheter and oxygen tent. With the *funnel*, the concentration of oxygen in the nasopharyngeal air has been found to¹ be only 22 per cent, when the oxygen is delivered at the rate of 2000 c.c. per minute. This is obviously inadequate, and the method should therefore be discarded. By means of the *nasal catheter*, the concentration of nasopharyngeal oxygen with the same rate of oxygen flow is 35 per cent. In the absence of an oxygen tent, this method is undoubtedly of some value and should be used. With the *oxygen tent* the oxygen concentration may be accurately regulated so that the optimum 40 to 50 per cent may be obtained. To accomplish this, an oxygen flow of five to eight liters per minute is necessary. High concentration should not be used for any length of time because of the danger of lung tissue damage.

Diathermy.—During the past decade, numerous reports have appeared in the literature on the use of diathermy in the treatment of pneumonia. While there has been some difference of opinion as to the value of this measure, almost all are agreed that it is of definite symptomatic value, and that it is not harmful when properly used. Both the long and short wave diathermy have been used. Wetherbee et al.,¹² in a study of a small but well controlled group observed not only a definitely comforting effect on the patient, but a significant reduction in the mortality in the treated group. With such reports as these, this method of treatment deserves more extensive clinical trial, if for no other purpose, than to add to the comfort of the patient.

Pneumothorax.—This is probably the latest method in vogue in the "Modern Treatment of Pneumonia." While numerous reports have appeared in the literature during the past fifteen years, the total number of cases treated is still too small to draw any far-reaching conclusions. The theories as to the mode of action of this new form of therapy are largely on a mechanical basis.

The interposition of a thin layer of air between the inflamed pleural surfaces is sufficient to relieve the pain and dyspnoea so distressing in this disease. This enables the patient to inhale more deeply and thus more completely oxygenate his blood. A second explanation of the effect of this form of therapy is referred to as the "rest theory." The involved lung is put at rest, with a resulting decrease in absorption of toxic products. The latter is accomplished either by a reduction in the lymph drainage from the involved lung, or by a diminution in the blood flow through this area. The technic employed is the standard one used in any other pulmonary condition. It is generally agreed that large volumes of air 300 to 500 c.c. should be injected frequently to insure and maintain adequate collapse of the diseased area. Blake³ uses even larger volumes, without regard to the production of positive intrapleural pressures. His results appear to be the most satisfactory.

In the selection of patients for this procedure the time duration of the illness is of major importance. The earlier in the course of the pneumonia the collapse is started, the more effective are the results obtained. Unilateral involvement, while not a requisite, is desirable.

The clinical results obtained with this are often gratifying. The symptomatic relief of pain and dyspnoea are quite constant, and if for no other reason than this, its use in selected cases would seem justifiable. The temperature effect is often striking; at others disappointing. I have observed a drop of four degrees to six degrees following the introduction of as little as 300 c.c. of air in several cases. Of the thirty-one patients treated, a complete and permanent return to normal in twenty-four hours was observed in only four cases.

The incidence of extension of the pneumonic process and the development of empyema after pneumothorax has varied in different clinics. In most reports, this does not seem to be a common occurrence.

Finally it must be said that this form of therapy is still too much in its infancy to draw any far-reaching conclusions as to its value. It involves certain potential hazards and, therefore, should not be used routinely

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unless thorough familiarity with the technic is possessed by the operator.

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SIDE-STEPPING RESPONSIBILITY—VIA DRUGS*

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Human beings are fundamentally so constituted that they will side-step nothing unless it carries in it a challenge. Let us, therefore, at the outset, define responsibility. Responsibility is a social behest. Each of us is beholden to the other. We are actually dependent one on the other. Our dependence on one another is a part of the social order of our existence. Responsibility is an integral part of the society in which we move and have our being. It lays upon us certain obligations toward our neighbor, the community, the state, and the nation in which we live; and, of even greater importance upon each of us individually in his own behalf. Unfortunately, the very moment when in human conduct there is injected, or even implied, an element of compulsion or coercion, we immediately bristle with some indication of resistance, antagonism, or retaliation. At the present time, it is very common for us to be met with the rather juvenile retort, "I don't have to do anything—but die." Trite as such expression is, let it serve to bring to us the query as to the reason for our coming into existence. Why are we here? Not in this room or even in Detroit, but why are we counted as inhabitants of this earth? Our purpose on earth is certainly not resident in death and all that it implies, but rather in the opposite—to live. If, then, it be our purpose to live, and I think it is, it is likewise imperative that we live creditably. Such manner of living is, of course, open to debate. Despite all debate, however, civilization with all the refinements of the centuries as seen in organized society demands that the conduct of

each of us must be acceptable to those about us. Each individual, in the pursuit of his food, rest, shelter, and the expression of his emotions in the field of love and sex, must so conduct himself that his mode of living will be in accord with the majority of the people in his community. Whether its roots be traced into the various strata of biology or sociology, responsibility, in final analysis, is an inherent consciousness of duty to self and to others—an unwritten mandate that we shall so respect ourselves that we shall win the respect and the esteem of others.

How can we side-step our sense of responsibility? How can we lose it? In a thousand different ways. A "sick headache" at a strategic moment is a splendid alibi to help us to escape from an appointment we do not want to keep. The breakfast cup of coffee must be loaded with something akin to dynamite if we are to accept in truth all the sustaining references to it. The cigarette must be a virtual soothing syrup for the nerves if we are to believe the beneficial pronouncements of its many users. The cocktail and the hip flask carry within them the capacity to change

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mountains of trouble to sunlit hills of fancy—but Dr. Clark[‡] will tell you about that. All in all, I fear we must admit with the psychologist, William James, that much is dependent upon habit. Whether we be of wheat that has fallen on fertile soil or stony ground, we are always in danger of the tares. Whether our constitutional endowments, our heredity, be the royalist blue, or somewhat shady; whether the environment in which we live is kindly or unkindly, we are, nevertheless, or at least supposed to be, intelligent human beings in the full franchise of our right to choose.

On the morning after the night out, there is aspirin, bromides, bromoseltzer, bromoquinine, chloral, "luminal," phenobarbital, veronal, barbital, medinal, allonal, ipral, and all the other "als." Upon such a background of self-prescribed drugs the indulgent one does not find it hard to resort to another "snort" or possibly a "shot." And, what do we get out of all of this? Mostly, a big headache. What self-deluded slaves of habit we are! Withal, here we are, you and I, assembled to heap condemnation upon those who side-step responsibility. Yet, at this very moment, you and I will do little more, possibly, than to feel a bit ashamed and to mutter, "To err is human." But the force of habit is not through with us.

Dr. Carpenter in 1874 expressed the very kernel of habit when he said: "Our nervous system grows to the modes in which it has been exercised." The very first thing that habit does is to simplify the movements required to produce a given result. Any act becomes easier after it has been done several times. Think for a moment of how you trained your feet when you first learned to drive your car, and how easily you now shift your foot from the accelerator pedal to the brake pedal when you want to stop for a red light. If, in repeating the same act, it were necessary to give each time our undivided attention and a full measure of consciousness, it is evident that all the activity of our lifetime would be absorbed by a few actions. We might be occupied all day in dressing and undressing, and the washing of our hands or the fastening of a button would be as difficult to us on each occasion as it would be to a child on its first trial.

[‡]Dr. David R. Clark, Detroit, Michigan, addressed the joint meeting (loc. cit.) on "Side-stepping Responsibility—Via Alcohol."

Habit, then, is kind in bringing to us the fullness of life. Yet, so subtle and insidious is the expression of its laws that we must be constantly on guard against its many ethical implications and its dangers. The Duke of Wellington is said to have exclaimed: "Habit a second nature! Habit is ten times nature." To this, the veteran soldier and the drug addict alike would attest. Little wonder then that the drug addict is so slavishly enmeshed.

The promiscuous use of aspirin, coffee, intoxicating liquors, tobacco, coal tar drugs, and patent medicines, has its serious dangers, but for the next few minutes let us confine ourselves to a discussion of those addicted to opium, morphine, paregoric, laudanum, heroin, cocaine, and marihuana. You ask the extent of the problem? It is not a problem in our big cities only. It is rural as well as urban. It is not only national, it is international. Drug addicts are a shifting population, hence their total number is at best an estimate.

In 1878 Dr. Marshall made a survey of the State of Michigan in the matter of drug addiction. Because of "the supposed impossibility of getting reliable information of the number of addicts in the larger cities," he omitted Detroit, Grand Rapids, and East Saginaw from his survey. Dr. Marshall's survey on the basis of the State census of 1874 affected a population of 225,633. Among them he found 1,313 addicts, 803 women, 510 men. The population of the whole state at the same time was 1,334,031. If the number of addicts found holds good for the entire population, there were at that time in the state of Michigan 7,763 drug addicts. That was fifty-seven years ago.

Between July 1, 1925, and June 30, 1926, Dr. Charles E. Terry, Executive of the Committee on Drug Addiction of the Bureau of Social Hygiene of New York City, conducted a survey of metropolitan and suburban Detroit, including a population of 1,625,000. He found record of 511 legally supplied drug addicts, and found 734 illegally supplied addicts had passed through the Detroit Police Department during that year. He gave considerable weight to the Detroit Police estimate that there were from 10,000 to 12,000 illegally supplied addicts in the city at that time. Assuming that the low figure of 1,245 (511 + 734) addicts for Detroit holds true for the rest of

the State, there were on the basis of the census of 1930 ($4,842,325 \times .766$) 3,719 addicts in the state of Michigan in 1930. This figure is obviously too low. If the police estimate of 10,000 is taken ($4,842,325 \times 6.153$) the total number of addicts for the state in 1930 would be 29,795. Such figure is obviously too high. Careful studies, such as those mentioned, place the total number of drug addicts for the United States between 90,000 and 140,000. To register most effectively in my memory the approximate number of drug addicts, I say one addict for every 1,000 of the general population is too low and two addicts for every 1,000 is too high. On the basis of such deduction, there are in the United States between 125,000 and 250,000 drug addicts. A *truly* considerable number of side-steppers.

In 1923 and 1924, Dr. Terry made a survey of six cities in the United States to determine the per capita legitimate or medical use of opium and cocaine. From his data collected in Sioux City, Ia.; Montgomery, Ala.; Tacoma, Wash.; Gary, Ind.; Elmira, N. Y.; and El Paso, Texas, he concluded that 8.56 grains of crude opium and 20.79 grains of coca leaf per person were necessary for the annual medical needs of the population of continental United States. In terms of pure morphine and cocaine, that would mean more than six doses of morphine and one dose of cocaine for every person. And, that does not in any way take into account the illegal use of opium or cocaine, nor their use in case of disease epidemics or war. In wholesale language, it would take 72 tons of crude opium and 123 tons of coca leaf to supply the annual legitimate medical needs. Two rather awe-inspiring heaps of pain-killers. Medical T.N.T. for headaches, colics, and pains of every description. Grant, on the one hand, that relief of pain is a comfort and a security in health as it is in disease. You must grant, on the other hand, that such comfort and security if obtained through the use of very dangerous drugs is dearly bought, often too dearly. Is there any danger for people such as you and I? Isn't drug addiction, after all, limited to the weaklings of the race? No, such is not the case. Physicians, lawyers, priests, ministers, dentists, men and women of every profession; men and women of high finance and of high so-

cial position are numbered among the drug addicts. The strong and the weak alike are affected; the rich as well as the poor. In a single Federal report for a period of fourteen months, October 30, 1930, to December, 1931, the Federal Narcotic Law caught in its coils 263 physicians, 12 dentists, 9 pharmacists, 3 osteopaths, and 3 veterinarians, all addicted to the use of narcotic drugs. The number dispensing narcotic drugs illegally was even higher.

Although the knowledge of narcotic alkaloids is probably as old as the use of herbs, morphine as such was first discovered by Sertürner in 1805. The use of morphine by hypodermic needle didn't come about until 1853. Cocaine was first clinically used in 1884. So our problems of drug addiction, as we know them today, are really young and as in youthful problems generally we see many more excuses than corrective results. The biggest and most deeply rooted alibi in the use and the misuse of narcotic drugs is that they are absolutely necessary to the practice of medicine. Without doubt, they have held, and still hold, a very important place in medicine and surgery. Even the American Medical Association has declared them to be indispensable. Their fame then, as killers of pain, should really outrank their infamy as producers of pernicious habits of misery. The ox and the horse were once judged indispensable to transportation. Where are they now? I strongly suspect that the indispensability of the narcotic drugs, particularly those derived from opium and coca leaf, is at the beginning of its decline.

The drug addict that we know most about, the addict who is the basis of newspaper accounts and comments, is the chronic, the end-result of his own degrading habits, a spineless human derelict. He no longer works, yet, he must have from 6 to 60 grains of "stuff" a day. How does he get it? He will stoop to anything and everything to get it. Usually, he practices petty larceny, at which he becomes very clever. He must steal from merchants, from any of us, in fact, \$30.00 to \$50.00 worth of goods daily, for in converting them into cash he is forced to sell them at great discount. With his cash he buys his drugs from the professional peddler. Between you and me and the addict described, there are many gradations. There is a considerable number

of addicts about whom we know very little. They are those that keep their habit under control and can afford it, i.e., they do not rob or steal to maintain their habit. Then, there is that group of addicts that more or less rightfully declare that their habit is due to disease or surgery and the doctor's administrations. Various authorities on the subject state that from 5 to 20 per cent of all drug addicts owe their habit to that cause. In this group are included most of those legally supplied with their drug.

At the outset of this brief review, I emphasized the significance of responsibility in human relationships and stressed the subtle development and potency of habit. In the drug addict all sense of responsibility is lost and habit has enthroned itself as an insatiable demon. How does all of this come about? Limited time forbids details. However, idle curiosity, unfortunate associations, and careless medical ministrations must accept the major blame. The unwillingness to take a dare, and the willingness "to try anything once" are dangerous snares when narcotic drugs are concerned. To the uninitiated, the first small dose of an opiate produces a light sleep, or rather a state of abstraction, or "brown study," pain melts away, the imagination is unleashed at the expense of insight, judgment and reason, time is annihilated, and a mental well-being with pleasurable imagery, often luxurious dreams, shut out the tedium of life. Do we need to explain why the second dose is easier to take than the first? Resolutions and good intentions have little weight in the face of such luxuriant ease. Little wonder then that the drug addict, of whatever class or type, is a luckless, hapless pervert of good intentions. Truly, he merits your thoughtful consideration, and let your thinking be tempered with reason and seasoned with justice.

What is the remedy? Is there any? I think so. We effectively imprison our criminals at least spasmodically and periodically. We efficiently institutionalize our insane. We thoughtfully house and train our mental defectives. We judiciously colonize our epileptics. But, the highly morbid drug addict is left to roam our streets at will. Interested doctors and energetic social agencies spend time and money inordinately in at-

tempting to bring rehabilitation to some new found addict, only to turn him loose again to associate with those who caused his downfall in the first place. Eighty per cent of all drug addicts, known and unknown, live like migratory rodents in the nooks and crannies of our cities and villages. Less than five per cent of these street-dwellers can be reliably rehabilitated. But why spend time, money, and effort on this five per cent, if only to turn them back to the streets again? Even a sound apple placed in the midst of a bushel of rotten ones has a better chance. Regardless of the refinements of methods and provisions, one of the first steps necessary is to house, segregate, and colonize effectively the 80 per cent of addicts above defined. Colonization on an island of adequate size and proper location would be most effective. Keep the streets clear of the despoilers. But, it can't be done. Why? Are there no islands? No! There is no legislation! So that is where the difficulty, the impossibility, lies. Demand the legislation! Get it!! How many of you have asked for it?

The Federal Government under laws approved January 19, 1929, and June 14, 1930, authorized two large federal institutions for drug addicts—one at Lexington, Kentucky, the other at Fort Worth, Texas. The one at Lexington, Kentucky, has been in operation for more than a year. That is not enough. Each and every state should assist in this big project by developing a colonizing institution of their own. Michigan is in a very strategic position to be among the first to do just that. That places squarely upon the shoulders of you and me a responsibility. Are we going to side-step it? I very much fear the issue before us will, as President Cleveland once so aptly declared, "lapse into the coma of innocuous desuetude."

Friends, good intentions are useless unless translated into action. Good intentions do poorly on a diet of procrastination. Let not your potent resolutions, your good intentions, die of starvation. Nurture them well and may we meet again—in action.

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THE FUNCTION AND RESPONSIBILITY OF THE RADIOLOGIST IN MEDICAL PRACTICE*

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The new section in Radiology in the Michigan State Medical Society symbolizes the advance of this branch of medicine. Radiology is one of the youngest of medical specialties and it has had to win its spurs. The story of the discovery of the x-ray by Roentgen in 1895 is known the world over. The actual discovery of the x-ray may have been accidental, but, in common with many other great discoveries it happened to one who by training and background was able to recognize it. The actual discovery, however, was the great achievement. Its present value in medicine, however, was made possible by thousands of trained observers who added bit by bit to our knowledge which has made present day radiology possible. While the greatest of credit is due the discoverer and should always be given him, it is well to bear in mind that the use of the x-rays in medicine today is also the product of the radiologist in conjunction with the physicist and the manufacturer of x-ray equipment. Team work by these groups had led to the widening of the use of this agent to a truly remarkable degree and the end is not yet.

The use of the x-rays has been in two fields, viz., diagnosis and treatment. These fields are as different in scope as are surgery and medicine so that many radiologists confine their work to one field or the other. Diagnostic roentgenology from the first attempts at demonstration of the bones of the hand, has proceeded along two channels, radiography and fluoroscopy, until now it is widely used in every field of medicine in the effort toward more accurate diagnosis.

Roentgen therapy began in treatment of the skin and, by a more or less hit and miss method, gradually evolved, thanks to the

physicist and, more dependable equipment, to a better knowledge of the factors which control radiation therapy. Today tremendous voltages are handled safely and understandingly, and x-rays of known quantity and quality are delivered to the patient. Widespread use of radiation therapy has given us an understanding of the reaction of body tissues. The discovery of the fact that some tissues are more sensitive to radiation than others made the treatment of cancer and other conditions possible. Radium, when discovered, added to our knowledge of the structure of matter and augmented the armamentarium of the radiologist in many ways.

The evolution of the radiologist from a medical photographer to a position of a medical specialist and consultant has gone hand in hand with the experience gained by actual use of the x-ray over many years. In the past radiologists have organized in groups for mutual help. The American Roentgen Ray Society established in 1900 has now a membership of 421. The Radiological Society of North America which began in 1915 has now 1114 members. The American College of Radiology established in 1925 has 183 members. The American Radium Society formed in 1925 has 134

*Chairman's address before the Section on Radiology, first annual meeting of the Michigan State Medical Society, Detroit, Sept. 23, 1936.

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members. The American Board of Radiology formed more recently has a limited membership who are admitted on the basis of experience and after a rigid examination. The Section on Radiology in the American Medical Association was established in 1925. Similar societies in foreign countries are in existence. Thus radiology has taken its proper place by steady growth to a separate and distinct medical specialty. It is fitting that on request of the Michigan Association of Roentgenologists the Michigan State Medical Society should recognize radiology as a medical specialty and should have voted for the formation of a section of radiology. We hope that this will result in the dissemination of radiological knowledge through the program and the Journal.

In the early days the x-rays were used in fractures, renal calculi, the location of opaque foreign bodies and a few other conditions. As its use extended, gastrointestinal examinations, the visualization of sinus tracts, the retrograde and intravenous urogram, the encephalogram, the diagnosis of non-opaque foreign bodies in the lung, the exact localization of opaque foreign bodies in the eye, the proof of a bowel obstruction, or a ruptured abdominal viscus, nasal sinus, teeth and mastoid study, bone pathology, nearly, if not all, chest conditions. The mere tabulation of all its uses is beyond the scope of this paper. Suffice it that today the list of all possible uses of the x-ray in diagnosis is a formidable one which concerns every field of medicine.

One function of the roentgenologist is to make known to the medical profession the means which radiology possesses to diagnose and treat disease. It need not teach the fine technical points in diagnosis but should, rather, point out where it can be of service. Diagnostic methods have undergone profound change because of it. It is still just as necessary as ever to have a careful history and physical examination and to combine them with sound reasoning. It is our function to point out that certain disease entities are more clearly understood with less chance of error by using the x-rays than by any other means at our disposal. Failure to utilize its help may delay the early diagnosis. Intelligent treatment cannot begin until the problem is understood. Radiologists know that every

field of medicine has need of intelligent help from them in selected cases.

The x-rays also have an equal place in the treatment of disease, and one might say that no single therapeutic agent alone is so helpful in so many different diseases as the x-rays in therapy. The progress of our knowledge in therapy alone has been amazing. The physicist and the radiologist have worked together in solving this problem, one to improve the methods of production of x-rays and to show how to measure them, the other to use each new step to carry on medical research and to compile the experience gained.

Radiology also offers a broad field for research. The possibilities for medical investigation along this line are great and doubtless many new discoveries await investigators who will use it.

One responsibility of the radiologist is to see first that only those properly qualified are permitted to use radiation in diagnosis or treatment. While anyone may purchase an x-ray machine, the use of it without proper medical background and radiological training is accompanied by danger to the patient and himself and the results are often so misleading that radiology is discredited. One does not buy a scalpel and straightway become a surgeon.

Granting, then, that radiology is best served by physicians who have had proper training in this special field, what further responsibility should the radiologist assume? In the first place, he is a consultant. One does not send him a patient and always receive the diagnosis in return. True, the x-ray examination alone may solve the case, just as one look at a patient may at times make the diagnosis plain. But as one can not depend on inspection alone to diagnose all cases in the field of medicine, so an internal inspection by means of the x-ray alone may not be sufficient. The accumulated medical information acquired by means of a good history and physical examination, together with the use of any of the numerous laboratory methods is often necessary so that a proper correlation of these data may lead to the correct diagnosis. The function of the radiologist therefore is to consult with others, and to the discussion add his opinion based on his experience. To do this well he must be a clinician and

an anatomist. Here he has an opportunity to learn from others and he may thus become a clearing house for medical information which should serve to raise the general standard of medical practice.

A further function of the radiologist is to instruct other medical men as to the value of the x-ray in the diagnosis and treatment of disease. He needs not necessarily teach the fine points in x-ray diagnosis but should in his hospital staff meetings or in the county and state medical societies call attention to its value, so that it may be more fully utilized.

He should teach the hospital interne the proper relation of radiology to medical practice. He should present the radiologic method in therapy where it offers equal or greater advantages. This field has often been overshadowed by older methods and an honest comparison should be made. If radiation offers a superior method its use should be upheld whenever the question arises.

In other words, the radiologist should strive to impart his knowledge to others and to learn from them in return. The field of therapy gives him an opportunity to take charge of the patient and when necessary to augment its use by whatever means necessary to accomplish the best result. One seldom hears any more, "give the patient a five minute treatment," but rather "I am referring this patient to you for x-ray or radium therapy, and will dis-

cuss with you any general treatment which may be indicated."

In therapy one frequently needs assistance from the surgeon or internists, and in turn the surgeon often needs the radiologist, in many cases; for either alone to treat the patient would be a grave mistake. Both should work together.

Radiologists in the infancy of their specialty were often enthusiastic in reporting their results but men in the older specialties were quick to correct any overstatement, so that we have come to recognize that results must be proved before they can have lasting value.

The radiologists in the Michigan State Medical Society are proud of the achievements of radiology. We have been received individually and collectively as consultants in medicine. We are grateful to the Michigan State Medical Society in honoring us by the creation of the Section on Radiology. There can be no doubt that both radiologists and the profession at large will profit by this action; one by being accorded recognition, and the opportunity of disseminating radiologic knowledge and the other by the opportunity to know more fully in what ways radiology may add to the proper diagnosis of disease and its value in therapy. This section, I am confident, will endeavor to measure up to the high standards set by the older groups and will strive to bring to the medical profession of Michigan the best that radiology has to offer.

SPONTANEOUS HYPOGLYCEMIA IN THE VAGOTONIC INDIVIDUAL

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It may be rather presumptuous on my part to discuss hypoglycemia and its possible relations to imbalance of the autonomic nervous system, but because of having come in contact with a number of cases that have suffered in various ways with this disease, I feel it worth while to offer this paper. The use of insulin and modern methods of estimation of blood sugar have led to a better understanding of carbohydrate metabolism, but nevertheless our knowledge is far from complete. For instance, we find that one individual may have a low blood sugar without symptoms and another may have all sorts of unpleasant and even dangerous symptoms.

Schur and Taubenhaus⁵ mention three factors that may produce spontaneous

hypoglycemia: (1) Increased insulin formation resulting either from a quantitative increase in the islands of Langerhans or from hyperfunction of these islands; (2) disturbance in the counter regulation by hormones; (3) disturbance in the mobiliza-

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tion of glycogen. Cannon's² discussion of homeostasis of blood sugar reveals a complicated regulatory mechanism, and calls attention to the prominent part played by the autonomic nervous system. No two individuals present the same degree of relative

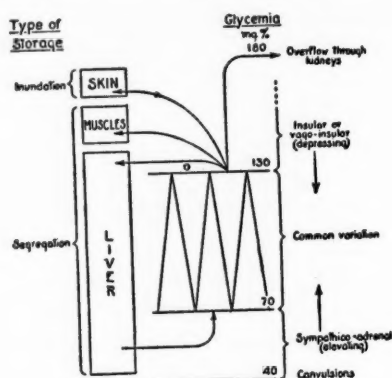


Chart 1. Diagram illustrating the action of agencies which preserve homeostasis of blood sugar.

From the *Wisdom of the Body* by Dr. W. B. Cannon, courtesy of the publishers, W. W. Norton and Company, New York.

balance of stability of this system. Hence the variations in the regulation of the carbohydrate metabolism and the blood sugar level. In connection with this we must also consider its relation to the endocrine system and their combined effect on the body chemistry.

In this discussion I shall limit my remarks on hypoglycemia to the functional or spontaneous type. Insulin is essential in the utilization and storage of blood sugar and is considered a secretory product of the islands of Langerhans. Since its therapeutic use in diabetes, hypoglycemic attacks from an overdose of insulin have been recognized. Later, similar symptoms noted in patients who had not had insulin led to the study of blood sugar levels and the recognition of hypoglycemia.

The optimum level for blood sugar is 100 mg. per 100 c.c. of blood, with a range between 80 and 110. When the level drops to 70, symptoms such as slight discomfort, hunger or sweating may occur, and at receding levels, tremor, incoordination, weak, irregular pulse, chest discomfort, dyspnea, unconsciousness and even convulsions. This unusual variety of symptoms may be due to imbalance of the autonomic system and its devious influence on body chemistry and nervous reactions may account for the wide range of symptoms noted. Cannon² presents evidence that the autonomic nervous system

is a factor in controlling blood sugar level. The sympathico-adrenal system being opposed to the action of the pancreas aims to maintain blood sugar at an optimum level. If its influence is eliminated and the vagus stimulated there is a consistent lowering of the blood sugar—in other words, the sympathico-adrenal side calls the blood sugar from storage to maintain a proper supply. If it fails, then the influence of the vagus on the pancreas stimulates secretion of insulin and overdosage occurs with resulting hypoglycemia. Cameron¹ visualizes the relation between the vagus and sympathetic as a "tug of war by each party responding by increased effort to the efforts put out by the other."

During the last few years I have found a number of patients with attacks similar to those described as insulin shock or hypoglycemic reactions. The symptoms range through a considerable portion of those above mentioned. They have all been individuals who have passed through much anxiety and worry over long periods of time with final appearance of exhaustion and the hypoglycemia. These attacks come on at irregular intervals and are usually precipitated by undue physical effort with perhaps some unusual anxiety or worry, as a result of which symptoms of hypoglycemia develop, such as weakness, sense of hunger, irregular heart and the like. The majority of my cases happen to present circulatory symptoms as the chief complaint, and worry. However, the fact that none of them exhibited any physical or cardiographic evidence of heart disease prompted search for other causes for these attacks. The chief factor leading up to the attacks seemed to be fatigue from physical effort such as prolonged shopping and undue anxiety with loss of sleep. Such a condition leads to overactivity and fatigue of the sympathico-adrenal system, resulting in a drop in the blood sugar to the point where stimulation of the vagus further reduces blood sugar, precipitating the more serious symptoms of hypoglycemia. In our study of these cases it was noted that nearly all exhibited an arterial hypotension, a minus metabolism and fatigue, suggesting a tendency to sympathicotonia followed by a stimulation of the vagus and resulting in vagotonia. Sugar tolerance curves revealed a rather sudden drop in sugar level and at this point

SPONTANEOUS HYPOGLYCEMIA—MORTENSEN

many expressed the fear of an impending attack, and almost invariably they were insistent on resting during the remainder of the period required for the sugar tolerance test. The curves revealed a moderate increase in sugar with this period of rest and

the rest of the observation, and with it gradually recovered from these milder symptoms.

Case 2.—C. N., salesman, aged forty-six, experienced worry and anxiety over a period of two years, because he had lost his business early in the depression. On account of his economic situation and the responsibility of his family, he finally devel-

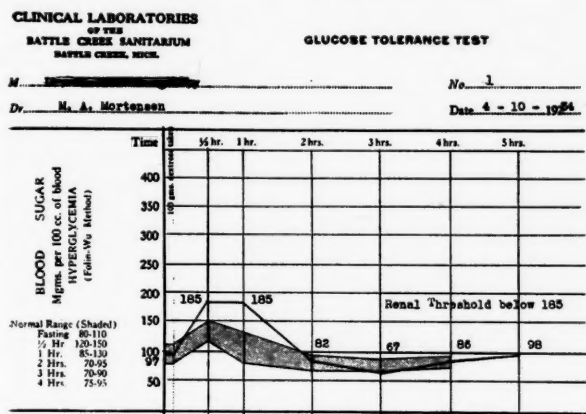


Chart 2. Case 1. Glucose tolerance test.

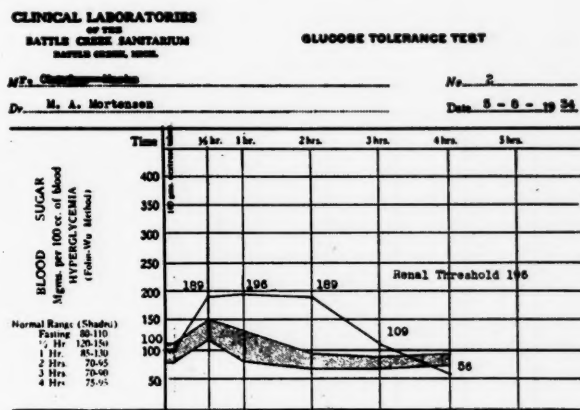


Chart 3. Case 2. Glucose tolerance test.

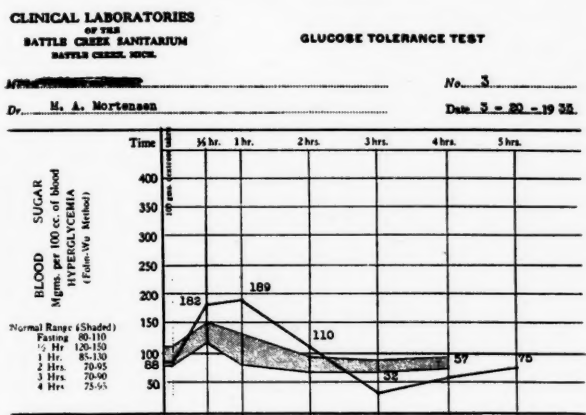


Chart 4. Case 3. Glucose tolerance test.

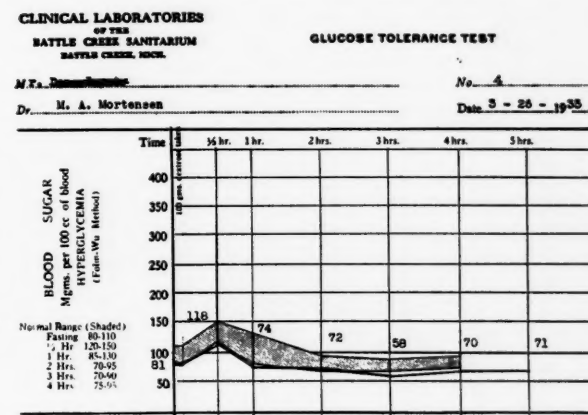


Chart 5. Case 4. Glucose tolerance test.

disappearance of weakness and fear of the attack, suggesting the response of the sympathico-adrenal side of the autonomic system.

Case 1.—C. P., physician, aged forty-one. Early history was unimportant clinically. The patient led a very strenuous life professionally and indulged in championship contests of swimming and tennis. For some years unusual anxiety and worry added to his usual duties with nervous exhaustion. Three and one-half years ago he experienced a tight sensation in the chest, with weakness and fatigue after exercise. As time went on discomfort came on more frequently and with less effort, and with it irregular heart and at times a bradycardia as low as 30. With half an hour's rest symptoms usually disappeared except weakness and increased anxiety about his condition. Myocarditis had been diagnosed. Examination: No evidence of heart disease. Cardiogram normal. Sugar tolerance curve 97-185-82-67-86-98. At the point where sugar was at 67 he developed weakness, irregular heart and insisted on lying down through

oped attacks of sudden weakness, shortness of breath, flatulence with marked distention of the stomach and colon, with pain in the left side. After the first attack another one occurred that was more severe and with pain radiating into the left arm. He was advised that he had angina and was given amyl nitrite. Anxiety over this condition added to that above mentioned, increased the frequency of the attacks to an almost daily occurrence. Examination: Obese. Cardiac findings negative. Blood pressure 110 systolic; 75 diastolic. Cardiogram normal. Unusual distention of the stomach and colon. Aerophagia was noted. Sugar tolerance curve 100-189-196-189-109-56. At the third hour he began to anticipate trouble and at the fourth complained of chest discomfort, weakness and sweating.

Case 3.—N. G., housewife, aged 73. Past history was essentially negative except that the patient always has been inclined to be on a nervous tension. She complained of weakness, palpitation, irregular heart varying in intensity and duration. She was fearful of heart attack. In one attack of two hours' duration, she fell to the floor but remained con-

scious. She had chest discomfort and dyspnea. Examination: Blood pressure 130 systolic; 75 diastolic, pulse 70, regular. Heart normal. Cardiogram normal. Basal metabolic rate -12 and -14. Sugar tolerance curve 88-182-189-110-32-57-75. During the test the patient insisted on remaining in bed but at the third hour felt very weak, heart irregular and was fearful of an attack.

Case 4.—D. J., male, musician. Previous history was negative. Chief complaint: Twelve years ago he had attacks of weakness and fainting on arising. These came on perhaps no more than once a year for a number of years, sometimes at intervals of eight months. The past two years he has worried a great deal because of lack of employment and finances. Attacks much more frequent and severe and with twitchings, unconsciousness and at times convulsive seizures. In this case attacks came in the latter part of the night or on arising, with no trouble during the day. Examination: No physical evidence of disease. Sugar tolerance curve 81-118-74-72-58-70-71. Note the difference in the sugar curve here and in the preceding ones. This type of curve leads to the suggestion of organic changes in the pancreas or in other parts of the endocrine system.

Management

1. Our effort in the management of these cases was directed towards the elimination of anxiety and worry with associated nervous tension, which, if accomplished does much to establish a better balance of the autonomic nervous system. Some cases need relief from their usual environment for a few months to accomplish this. In the first case this was advised, together with a program of moderate activity to eliminate undue fatigue, and a dietetic regime, and this relieved him entirely of his difficulties.

2. Dietetic program. Modify habits of eating, advising food between meals. Some may need food at bedtime and others immediately on rising. I have usually recommended a low carbohydrate diet with increase in protein and fat and have usually obtained satisfactory results. We have always advised against the use of concentrated sweets unless in emergency and then only in small quantities.

3. A mild sedative may be necessary for

a short time to insure proper relaxation and rest. Thyroid extract is useful in cases with low metabolism, and in some cases we have added suprarenal extract with apparent benefit. The suprarenal extract usually was given in doses of from two to six grains three times daily. I have not tried the use of small doses of insulin after meals as suggested by John.⁴ Patients have a decided aversion to the use of the hypodermic, but this should be tried if results of the above measures are not satisfactory. In Case 4 surgery was considered, but when the patient was not worried by finances, etc., and followed the dietetic program, his weakness and convulsions were satisfactorily controlled.

If we scrutinize our chronic invalids carefully, especially those that have been diagnosed as neurasthenic, we shall find some in whom spontaneous hypoglycemia can account for the major symptoms. In the study of our vagotonics, a sugar tolerance test may reveal a tendency to hypoglycemia. The term hyper-insulinism as introduced by Seale Harris³ may include other types of hypoglycemia and may need an entirely different type of treatment. In my experience the spontaneous type can be managed very nicely by rest, modification of dietetic program and perhaps some endocrine medication. If these patients can be taught to lead a more leisurely type of life, their difficulties may be entirely overcome.

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EARLY DIAGNOSIS IN TUBERCULOSIS

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The best method of stamping out tuberculosis would be routine examinations of the entire population; however, objections to this are obvious. The next best, which is now being carried on by the Detroit Public Health Department, is complete examination of all contacts and suspects. However, there will always be many thousands of unknown contacts. It is with this group that the general practitioner must grapple, in order to stamp out tuberculosis. For this reason, I have attempted to present the symptoms appearing early in the disease, so that a basis for a chest x-ray examination can be laid. Too often the stethoscope has rerouted the path to an x-ray. To wait until the patient comes in with hemoptosis, is giving the tubercle bacillus a long start. An early diagnosis of tuberculosis depends on a thorough understanding of the first symptoms appearing during the development of a parenchymal lesion. Unfortunately these early symptoms are chiefly subjective, and of such variable intensity that the patient frequently is unaware of the presence of the disease.

The clinical picture of tuberculosis may be divided in two parts, first; those symptoms which are due primarily to absorption of the tuberculous toxin (subjective), and secondly, those due to actual destruction of tissue (objective). The subjective symptoms will present a variable reaction in individuals depending on the amount of toxin absorbed and the individual resistance to the first infection. These may be classified as affecting the (a) Vasomotor System, (b) Nervous System, (c) Muscular System, and (d) Gastrointestinal Tract.

Vasomotor System

The vasomotor effects are chiefly peripheral. Slight flushing of the malar eminences occurs associated with increased activity, and persists during the later stages of the disease. There is a disturbance in the heat regulating mechanism of the body. Temperature becomes subnormal and there are frequent paradoxical thermal effects associated with the slightest activity either mental or physical. The patient will experience a marked sensation of warmth over any part of the body but the face and neck are the most usually affected. He will

suggest that the windows be opened, while other persons in the room will feel that the room is cool. Then again, he may feel slight chills when the room temperature is very comfortable. In the beginning, these sensations are readily modified by rest and exercise and are the earliest to appear. As the disease progresses, they become prolonged and more severe, until the classical picture of afternoon fever and night sweats is present.

The Nervous System

The changes in the nervous system are even more subtle than those affecting the vasomotor system. Very early in the disease these develop an increased tension throughout. This manifests itself by hyper-irritability, impatience, irksomeness, and inability to relax. Petty details and hindrances which were formerly overlooked, become magnified. The individual always wants to do something or to go somewhere. The disease produces an intoxication which result in turn in a mild exhilaration the *spes phthysica* so called. With progression of the disease these symptoms give way to marked nervousness and insomnia.

Muscular System

The prominent feature of the muscular system is fatigue. When it makes its appearance after a routine day's work, the average person believes that he has either been working too hard or that he has stayed up too late. He may go to bed early for a few days and feel greatly improved. He may have an opportunity, also, to rest in the afternoons; or he may decide to take a week's vacation. Rest, for the time being, eliminates the effects of fatigue, but the time soon approaches when an hour's or a day's rest is not sufficient. Going to bed early

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fails to give the required rest, for the patient awakens in the morning just as tired as if he had already done his day's work. As the disease progresses, fatigue gives way to marked weakness and exhaustion.

Gastrointestinal Tract

Subjective symptoms from the gastrointestinal tract in the early stages are frequently absent. The most common symptom is loss of appetite. The individual person begins to eat sparingly and develops aversions to various articles of food. At times, he may have attacks of nausea or severe epigastric distress and he is apt to blame the food which was eaten at the time. A constant feeling of hunger develops when few mouthfuls usually suffice; or just the odor of food may turn the patient's appetite.

As the disease progresses, the cecum may become involved, producing a pseudo appendicitis; and not infrequently an appendectomy is performed prior to a chest x-ray.

One early objective symptom consists of a dry non-productive cough, commonly spoken of by the layman as a "cigarette cough." It may appear very early in the disease for from a few days to a week, and then disappear at irregular intervals, to be forgotten by the patient. It is usually initiated by a slight tickling sensation in the throat. It may be associated with a prolonged cold, or it may come on in the evening, or after arising in the morning. Later on, it becomes productive and deep.

A pleural pain which varies from slight needlelike sensations, lasting only a few seconds to a definite soreness which may persist for days is often present as an early symptom. Its relation to respiration is variable. Any part of the chest is susceptible. There is nothing specific about

these sensations, so that they are frequently overlooked by the patient.

Third and last are the slight muscular tremors which involve the chest muscles most frequently, but may occur anywhere. These are also of such insignificance as sometimes to be overlooked by the patient. Up to this point, the clinical course of the more common insidious chronic form of tuberculosis has been discussed. However, tuberculosis may occur with an onset that does not appear to be more serious than a common cold. This form usually has an acute onset, and is accompanied by slight fever and malaise. The pulse rate is much higher than the fever warrants. The patient usually complains of having had a cold which "hung on."

The stethoscope is of little value at this time, for this type of lesion does not produce the consolidation signs as seen in pneumonia. An alteration in the breath sounds is frequently the only clue to the pulmonary lesion. If an x-ray examination were made, an acute exudative lesion would be seen. This differs from a pneumonia by the absence of resolution long after a true pneumonia should have run its course, together with the general appearance of the patient, who seems to be having nothing more than a cold. After a few days to a week, he returns to work. A few months later, hemoptysis may arouse the patient sufficiently to consult a physician.

In summing up the early clinical picture in tuberculosis, we can readily see the difficult problem presented to the general practitioner. There is not one group of symptoms that can truly be said are pathognomonic of tuberculosis. The physician must ferret out the minor details, which are frequently insignificant to the patient, and evaluate them as a whole.

TREATMENT OF OCULAR INJURIES*

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It is interesting to review medical opinion on any subject. To follow the reasoning and facts presented by the majority and minority is as instructive as diving into the arguments of a national election. When we are teaching, or when treating a patient, we must be decisive and even dogmatic. Tonight, without patients, we can discuss among ourselves some of the points pro and con of the treatment of injuries in our field.

It is not our purpose to consider here the many kinds of accidents in civil and industrial life, in driving and in sport, that daily take their toll of eyes, nor to itemize the types of damage, major and minor, that may be produced. We all know how each day brings its unexpected loss of vision to some victim; we all know that a minor blow can ruin a normal eye. Let us then investigate important points in the care of such patients.

Starting with lacerations of the brow and lids, we meet our fundamental precept: our efforts are aimed primarily at a restoration of function and vision, but next in importance we must strive for a good cosmetic result. To this end, after thorough cleansing, the skin tear should be made as straight as possible, and preferably in the line of the natural skin folds; the hairs of the brow must be restored to their normal direction; and sutures should not be too tight.⁴ To get a good restoration of torn parts takes study, and time. But it is better to do a good job at the first operation, than to be faced with the necessity of doing secondary operations in a scarred field, at a later date. General surgical principles apply. One must aim for the greatest cleanliness, use drains if indicated, deep buried sutures to take up tension, and fine dermal or silk for the surface.

Frequently tears are at the inner canthus, and sever the canaliculus. If seen within a few hours, good repair of the canaliculus is often possible. The torn nasal end of the canaliculus must be located and dilated. The lateral portion is dilated from the punctum nasally, revealing the other torn end. The wound is then closed, with either

a silk suture, running from the punctum through the canaliculus and out through the top of the sac, or a probe, lying in the canaliculus. These must be left in situ for several days.

It is well, when the lid is torn through, to suture the margin first, or at least place that suture, then the conjunctiva, and later the outer skin. A silk mattress suture, one arm on each side of the tear, tied externally over rubber or gauze, aids in taking up tension. Marginal sutures must be removed early, to prevent notching. Excise nothing, and maintain the ciliary line.

One should make a rule of invariably making a careful examination of the globe after any injury, however slight, especially after blows. This should include an ophthalmoscopic examination.

In penetrating wounds into the orbit, be careful to look for and remove foreign bodies, especially wood. Many men have run into bad luck with penetrating wood fragments, causing tetanus and meningitis. Orbital fractures must be looked for, with free use of x-ray, and dislocated fragments, if large, sutured into position. Sometimes an orbital hemorrhage must be drained to prevent pressure atrophy.

For corneal lacerations, we all agree that a conjunctival flap is usually necessary. Presence of a foreign body inside the eye must first be checked, and a prolapsed⁶ iris or ciliary body must be replaced, or the former excised. Foreign protein is often indicated in treatment, some of us using milk, but the majority favoring intravenous typhoid vaccine. Corneal ulcers must be actively treated, for more eyes are lost in many industries from infected ulcers than from perforating injuries.⁸ As a cautery, carbolic acid is still popular. Half strength

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tincture of iodine and trichloroacetic acid are also good. Stubborn cases demand the actual cautery. Many men like the thermophore.

On the treatment of chemical burns of the cornea and conjunctiva we do not agree.¹² Some feel that acid and alkali burns should be neutralized. Others, supported by experimental evidence, feel that free irrigation with large quantities of water does as well in stopping chemical action, and with less damage. Many men irrigate first, then try neutralization. Others feel that the cornea is no place to carry out a chemical reaction, even though with good intent. Certain it is that if neutralization is attempted, it should be done with only very mild and weak solutions, unlike the technician who counteracted 1/10 normal sodium hydroxide in her eye by instilling 1/10 normal hydrochloric acid.¹

All foreign bodies, especially lime, should be meticulously removed, the eye freely washed, an anesthetic instilled, and the cornea stained with fluorescein to determine the extent of the damage. Alkalies are more dangerous than acids. Ammonia is the worst of all chemicals. A few chemicals have a more or less specific therapy. Glycerite of tannic acid applied with a moistened applicator is recommended for soda, ammonia, and other alkali burns. For lime burns, 10 per cent neutral ammonium tartrate is widely used, as an irrigation, and then as drops for several hours. The anterior chamber should be emptied promptly in ammonia burns, since that chemical rapidly diffuses through the cornea into the aqueous. Tear gas (chloroacetophenone), as vapor is harmless, though it causes such irritation and burning that the eyes cannot be opened sometimes for twenty-four hours. The actual solution in the eye is a different story, and may cause irreparable damage from corneal scarring. The drug is insoluble in water, so the usual free irrigation should not be used. Instead, a 0.4 per cent solution of sodium sulphite in 75 per cent glycerine and water should be used freely.⁹ Sulphur dioxide, as from a refrigerator, should be thoroughly washed out with water, then with sodium bicarbonate in 75 per cent glycerine.

Prognosis must always be guarded, even days after the accident, and symblepharon

must be prevented. The usual method is to keep the cul-de-sac well anointed with oil or ointment, and passing a glass rod around the fornices at least once daily. Stanford of Memphis finds the insertion of the membrane of an egg the most effective preventive he has seen.¹⁰

Most men agree that the oxidized ring in the cornea after a superficial foreign body has been removed, should itself be completely removed, though many writers give no reason for this. Presumably the majority believe that leaving the ring is conducive to slough and infection. This might be questioned, and, certainly, often vigorous attempts to remove it cause more scar than leaving it. The foreign body should of course be removed, trying only a moist applicator first, resorting to a spud if indicated. Good light and magnification are essential. A dental burr is best for removing with smooth edges any remaining stain or oxidized material. It is often well to touch the defect with phenol, iodine, or trichloroacetic acid to prevent infection and promote healing. The cornea should be stained to determine the extent of damage, an anesthetic ointment instilled and the eye padded for twenty-four hours or until healed. The patient may use antiseptic drops if desired, and atropine where indicated. Glass in the conjunctiva may sometimes be located by stroking the surface with a moist applicator before the anesthetic is used. When gunpowder is scattered in the cornea, if one waits for forty or fifty hours, using only an antiseptic, then flushes freely with hydrogen peroxide, a very satisfactory and easy removal of the particles is often effected.¹⁰

The principles of handling penetrating wounds of the sclera are the same as those of the cornea. Prolapsed uveal tissue must be excised or replaced. Prolapsed vitreous must be excised. If the ciliary body prolapses the eye is usually hopelessly lost and should be removed. Although scleral sutures are sometimes indicated, it is difficult to insert them in a soft eye with a gaping wound, and a double conjunctival flap with mattress sutures is as effective. It has been shown in humans and experimentally in animals that perforation into the posterior chamber with exposure of vitreous does not afford a ready means of entrance for

bacteria, and panophthalmitis is much less frequent than might be expected.⁵ Tetanus antitoxin should be given, followed by foreign protein in 24 hours, and an intraocular foreign body ruled out. Manipulation should be minimal. The sclera may be coagulated about the wound to aid in prevention of detached retina.¹¹ Following contusions without penetration but with an anterior chamber hemorrhage, complete bed rest is justifiable for three to five days to prevent delayed secondary intraocular hemorrhage.² A thorough examination must be made following contusions. Although usually no permanent damage results from commotio retinae, serious lesions as rupture of the choroid and luxation of the lens may follow minor blows.

The subject of penetrating wounds brings with it the problems of sympathetic ophthalmia and when to enucleate. Those men who are rather free in removing badly injured eyes have a low incidence or practical freedom from sympathetic ophthalmia. But the disease is rare, and it has been shown more than once that many eyes removed for sympathetic ophthalmia don't have it. The removal of an eye is a major economic loss, and should not be taken lightly. Following the near point of accommodation, and using the slit lamp freely we are able today to diagnose sympathetic ophthalmia early and act at once in those patients who faithfully remain under our observation. When considering enucleation it is wise to have consultation, and to follow these rules set down years ago by Maitland:⁶

1. Enucleate at once if the injured eye is hopelessly destroyed.
2. If vision in the injured eye is only light perception, enucleate at once on slightest sign of irritation in the other.
3. Enucleate at once a blind eye that suffers recurrent inflammation.
4. Do not enucleate if the injured eye still has sight and the other is normal.
5. If sympathetic ophthalmia is in progress do not enucleate if the injured eye still has vision.

In brief, there is a tendency by many today to be more conservative in the care of perforating injuries, doing everything possible to save vision while of course watch-

ing the fellow eye. Some feel that the low incidence of sympathetic ophthalmia in the war-wounded was due to the routine use of tetanus antitoxin; and Benedict feels today that intensive foreign protein therapy at the time of the injury will prevent the development of sympathetic ophthalmia.

Another problem is what to do with foreign bodies in the posterior chamber; whether or not to remove them; whether they should come out by the anterior or the posterior route. If there has been any change in standard therapy for these cases in recent years it has been toward the conservative side.⁹ There are still those who feel that if a foreign body cannot be extracted the eye should be removed. With them are those who feel that an intraocular foreign body should be removed at all costs. We all realize that an eye with an intraocular foreign body is potentially lost; that the prognosis therefore must always be guarded, that the eye retaining a foreign body often develops a chronic uveitis. The majority of men today feel that preferably a foreign body should be removed, and as promptly as possible. But with study of cases, (and records of late results are all too few), we are beginning to realize that despite a fair share of good visual results soon after extraction of a foreign body, nearly 60 per cent of these patients have lost useful vision in five years, whether the foreign body was extracted or not.³ We are learning that it is easy to do more damage to the eye in extracting a foreign body than that object might do if left in place. And despite the phenomena of siderosis and chalcosis, we are seeing many cases in which an imbedded foreign body has done no harm.

A middle of the road attitude toward this might be as follows: On the slightest suspicion, an eye should be thoroughly examined for intraocular foreign body, always including an x-ray. If an object is found it should be localized as accurately as possible. If in the anterior chamber it can usually be easily extracted. If in the lens, it should be left until development of cataract can be determined. If such develops, cataract and foreign body can be removed at the same time. If the lens remains relatively clear, nothing need be done beyond observation, for the lens tolerates foreign bodies well. If in the posterior chamber, remove by the anterior route if possible,

especially if the lens is opaque. If the lens is clear there is cause for not attempting this, unless the object is minute. If the injury is very recent, the foreign body magnetic and definitely localized, we may make a slightly curved meridional incision, or a trephine, in the sclera, insert a magnet tip, and extract the object. If there has been a lapse of a week or more, the eye is quiet, the object small and its location uncertain, one is justified and probably wise in watchful waiting. In other words, removal of a foreign body is not our goal, but preservation of vision. Just as it is often prudent to let a bullet rest in the brain, so it is sometimes wise to let a particle rest in the eye, though admittedly there might be legal complications in case of suit.

The prognosis of eye injuries depends on the amount of damage and a few other special factors. Alkali burns may do well for a few days, then the cornea slough off due to penetration and continued late action of the chemical. Most corneal abrasions and foreign body cases heal quickly without significant scarring, but now and then an infection leads to loss of useful vision. Should there be iritis or a cataract with any injury, secondary glaucoma with all its difficulties may ensue. Injuries in the region of the ciliary body, especially, and most often in young people, are prone to cause sympathetic ophthalmia. Very mild blows may be followed by cataract or hemorrhage, and, a few days later, on effort, by a second intraocular hemorrhage. A piece of wood in the orbit, and even plucking an eyebrow, has more than once led to death. An intraocular foreign body, though removed at once

with good visual result, may cause retinal detachment from scar bands years later. Yet, according to Gradle,⁴ we are not justified in positively ascribing retinal detachment to injury, in testimony, unless it follow the injury almost immediately. A mild blow may provoke interstitial keratitis. A lid wound may, by subsequent cicatricial ectropion, lead to exposure keratitis and loss of the eye. It is well to be able to reassure our patients, but, to protect ourselves, and take some credit for the good results to counterbalance blame for the many bad, we must never promise too much.

Reviewing these topics has probably benefitted me more than you. Much of it is repetition to you. Yet eye injuries are very frequent, and there is room for considerable improvement in our results. By mutual discussion and suggestion we will all do better work.

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A FEW COMMENTS ON THE TECHNIC OF MAKING DIAGNOSTIC SKIN TESTS

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There has recently been so much comment on the subject of the inaccuracy and danger in making protein sensitization tests, that I feel that a brief statement concerning this valuable diagnostic aide may not be amiss.

It is an accepted fact that most drugs used in medical practice are poisonous if not used in the proper dosage. A child is not given the same dose as an adult. In making skin tests on a sensitive individual one is applying protein substances to the scratched skin or injecting them into the dermis. Any of these substances may be toxic to the patient and their degree of toxicity is unknown. If, however, a few simple precautions are used there is less danger in subjecting a patient to these tests than in permitting him to cross the street in broad daylight under the watchful eyes of the traffic officer. The following rules for safety may be laid down:

1. Never make an intradermal test on a patient for a substance to which he has not recently had a negative scratch test.

2. In making scratch tests, particularly on a patient with a history of asthma, or with a definite history of sensitization to one or more extrinsic substances, do not make too many tests at one time. On a child twelve to fifteen scratch tests may be ample for a first sitting.

3. In making scratch tests, if an urticarial wheal begins to develop immediately or within one or two minutes after the test substance is applied, wash it off carefully. Don't wait to see how big a wheal the patient can develop and permit him to absorb more test material than necessary. The chances are that the patient is enormously sensitive to this substance and it will be wise to use it as carefully as you would arsenic.

4. If you have not had considerable experience do not make intradermal tests. It is so easy to get false positives that this type of testing while more delicate is less accurate anyway. If you must use them don't make more than six or eight at a time.

While the above rules may seem ultra-cautious, accidents will be practically nil if

they are followed. In an experience devoted to allergy for the past eight years, I have seen only one patient who needed epinephrin to control his symptoms after scratch tests. This was the case of an adult male enormously sensitive to grass pollens. Ten pollen tests were made and were washed off in about five minutes. The constitutional reaction was readily controlled by epinephrin. When untoward results are reported from skin tests, a report should be made of the number of positive tests at the time, and the duration of time that the substance was permitted to remain in contact with the skin.

That skin tests need clinical checking is admitted. However, my experience with elimination diets has been unfortunate. The individual whose attention is focused on his diet or his child's diet often reaches the point where many unfortunate food phobias are developed. These may be more harmful than helpful.

The careless use of skin tests by untrained persons with indiscriminate substances tends to throw a valuable diagnostic aide into disrepute. At the skin section of the recent Michigan State Medical Meeting, the comments on skin testing were such that I would discard them entirely if I believed them of so little use. The truth is that properly used skin tests often furnish a short cut to therapeutic management that is of inestimable value to the patient.

THE THERAPY OF HYPERTHYROIDISM PRECEDING AND DURING THE MENOPAUSE ERA

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The majority of women do not abruptly enter the menopause epoch. There is usually a premenopause period wherein the formerly normal menstruation begins to present numerous vagaries. The periods become irregular as to frequency, quantity and duration, and with this alteration, numerous symptoms often appear. When the menopause is definitely established, these symptoms, if untreated, tend to become intensified and continue along with the typical climacteric symptoms such as hot flashes, depression, insomnia and many others.

It is in this premenopause era, as well as in the actual climacteric that many women first show signs and symptoms of thyroid hyperactivity. This is especially true in cases of surgical menopause of young women. The author is not concerned here with those cases of true Graves disease or toxic thyroid adenoma which may occur at this time of the woman's life except to mention that these cases progress rapidly and usually require early surgery. He desires rather to emphasize that the type of thyroid overactivity to be described is neither a Graves disease or toxic thyroid adenoma, does not require surgery and that the therapeutics must be focused on the ovarian disturbance rather than the thyroid.

The common complaints of these women are as follows: Changes in menstruation, usually an irregularity with a decreased flow, uncommonly an increased bleeding; later there appear in varying order nervousness, tremor, choking sensation, occasionally dyspnoea and palpitation, neck pulsations, increased perspiration; headaches usually in the occipital region; gastric symptoms and often the typical flushes of the menopause though the menstruation still is present in varying amounts. The flushes are much more severe where the menopause is definitely established but are common enough before that time. If all these symptoms first appear when the menopause has definitely occurred, they tend to be much more severe. The age of the average case with these complaints is between thirty-eight and forty-five years. If we exclude the flushes, it is readily apparent that the above symp-

toms are characteristic of those found in hyperthyroidism in any other period of life, the severity being dependent on the gravity of the thyroid dystrophy.

The physical signs found on examination usually exclude Graves disease or toxic thyroid adenoma. The basal metabolic rate is often plus fifteen per cent to plus thirty per cent and at times higher but the pulse at the time of the basal metabolic rate is usually not increased quite as much proportionately. There is seldom any exophthalmos or other eye signs, the thyroid is rarely increased in size. Neck pulsations are common but true cardiac involvement is infrequent. The pulse is often 90 or more per minute, the hands are moist and there is usually a definite tremor of the extended hands and fingers. The progressive and often severe weight loss so prevalent in thyroid toxicosis is rarely seen. On the contrary, these women are often obese. Though these patients are obviously nervous and often irritable, they do not always present the strained, tense, apprehensive appearance of true Graves disease. Clinical experience soon teaches one to recognize such cases as examples of active thyroid hyper-function rather than surgical thyroids. The author is convinced that if this condition at this particular period of the woman's life is ignored for any length of time, there is every likelihood for the development of a true thyroid toxicosis requiring surgery.

These cases are fairly common in an active Endocrine Clinic. The four cases reported here are from the Endocrine Department of the Detroit City Physicians' Office, a branch of the Welfare Department. The clientele is the usual free clinic type, welfare and unemployed people predominate.

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and there is a small number of the "white collar class" clinging desperately to the fringes of their former middle class status.

Case Reports

Case 1.—B. G., aged thirty-eight, married, Para V. Her chief complaint was the gradual decrease of her menstruation from six to two days' duration during the last eighteen months accompanied by severe occipital headaches which were especially painful shortly before menstruation. Within the last year there appeared in rapid sequence the following symptoms: nervousness, irritability, severe choking sensation, tremors, insomnia, and hot flushes, which of late had occurred several times daily. During all this time there had been a steady gain in weight. There had been many family and economic difficulties during this time to keep the patient greatly worried and disturbed. Until the present illness the menstrual, gynecological, and obstetrical history was entirely normal. Nor was there any family history of endocrine (particularly thyroid) disturbance.

The patient was of normal height and weighed 176 pounds. There was an anxious, strained look; the eyes were prominent; the thyroid was moderately enlarged, firm, freely movable, with no palpable nodules. The pulse was 90 per minute, the hands were moist and there was a coarse tremor of the extended hands and fingers. The general examination, however, was quite negative. The urine examination, blood count, and Kahn tests were all normal. The basal metabolic rate was plus twenty-three per cent with a pulse of 96.

The diagnosis was premenopause hyperthyroidism and the patient was ordered to take one tablet of desiccated whole ovary after meals. On her fourth monthly visit to the clinic she reported that in the last six weeks there had been a marked decrease in all her symptoms and that her menstruation was regular and continued for four days. On examination I noticed that she was much less nervous and that the strained, anxious look had disappeared. The pulse was still 80 per minute but there was no tremor of the hands. The medication was continued. Three months later, her symptoms had entirely disappeared and her menstruation continued for five or six days. On examination the pulse was 70 per minute, there was no tremor of the hands, and the basal metabolic rate was zero. She was advised to continue with the same medication for an additional three months.

She returned to the clinic fifteen months later with a recurrence of all her original symptoms, having been without medication for a year. One c.c. of ovarian follicular hormone in oil, injected intramuscularly every five days for two months was ordered. Three months later the symptoms were gone and the menstruation was again normal. Treatment was discontinued until symptoms recurred.

NOTE: This patient is likely to have several such episodes before the menopause is firmly established. To date, she has not returned for further treatment.

Case 2.—M. H., aged forty-two, single. Her chief complaint beginning two years ago was scanty menstruation, followed by severe nervousness, throbbing of the neck, insomnia, severe occipital headaches and hot and cold flushes. There were attacks of loss of memory, which condition became steadily worse. She was a graduate nurse but unemployed for several years. She was worried and depressed. About two years ago she noted that her periods, which always appeared every twenty-eight days and lasted about two and a half days, were now coming every nineteen to twenty-three days and were very scanty. She

was told elsewhere there was nothing wrong with her and that she should get a job, which advice did not help her symptoms or her mental depression.

Her father (a widower) was fifty years old when he married her mother who was seventeen. The patient was an only child, much pampered, yet brought up very strictly and entirely sheltered. She had a very rigid religious training. She had frequent nose and throat infections in childhood and a mild attack of gall bladder disease eight years ago. She emphasized her good health until her present illness and claimed to have been a very efficient, hard worker. The father died at sixty-one of pneumonia, and her mother died at forty-five of diabetes. There was a very close intimacy between mother and daughter. She had no living relatives and no male friends.

The patient was a short, plump woman in her forties. Her face was markedly flushed and the eyes were prominent and very bright and were either staring fixedly at the examiner or darted about restlessly. She was extremely verbose and talked vehemently. She was obviously markedly maladjusted and at times gave the impression of an incipient schizophrenia. In spite of her many troubles and complaints, she had slowly gained weight. On examination, the thyroid was not palpable, the hands were wet with a severe tremor, the pulse 140 per minute. The basal metabolic rate was plus twenty-two per cent with a pulse of 98. Urine and blood examinations and the general physical examination were all negative.

The diagnosis here was premenopause hyperthyroidism and the patient was ordered to bed for two weeks. She took ten minims of Lugol's solution once daily for ten days only and also three tablets of desiccated whole ovary daily until her next visit to the clinic. At her fourth monthly clinic visit, she stated that her headaches had disappeared, she was much less nervous and felt much better. Menstruation occurred every twenty-eight days with one day of abundant flow. On examination her weight was 133 pounds, her pulse 72 and there was no neck pulsations, tremor nor moisture of the hands. The basal metabolic rate was plus 14 per cent. She was as maladjusted as ever. She was advised to continue taking three ovarian tablets daily.

Two months later her basal metabolic rate was plus 4 per cent, pulse 72, hands dry with no tremor, weight 137 pounds. She looked and felt well.

Fourteen months after her appearance at the clinic, her menstruation again became very scanty but there was no return of her former symptoms. A course of 12 injections of one c.c. ovarian follicular hormone in oil, one every five days, was ordered for her. I believed she had entered the menopause.

NOTE: The clinical picture in this case cannot be ascribed to either a psychological maladjustment or a vasomotor disturbance. For it is significant that there has been no improvement in this woman's economic or personal affairs and she has continued to brood and worry about her circumstances more than ever. She is only slightly better adjusted. Yet her original signs and symptoms have disappeared and she is obviously in good health. On several occasions, she was so nervous and irritable that a grain of phenobarbital daily, in divided doses, was added to her other medication with excellent results. Psychiatric therapy was deliberately withheld in order to judge the efficacy of the described endocrine treatment. The clinical improvement is obvious.

Case 3.—A. T., aged forty-two, married, Para II. This woman's chief complaints were severe frontal headaches which began a year ago and occurred before and after menstruation and irregular periods. Instead of the former twenty-eight day cycle and five day flow, the periods now were entirely abnormal. She would miss an entire period and the next

HYPERTHYROIDISM PRECEDING MENOPAUSE ERA—FAUMAN

one would last from one to seven days. The follow menstruation would appear in three or seven weeks with either a scanty or very severe flow. In the last six months she had various aches and pains, had become increasingly nervous and irritable, and suffered much with insomnia. She developed "a lump in the throat" and a marked tremor of hands but had continued to gain weight. She was on the welfare rolls and had many reasons for maladjustment which need not be detailed here. Her past and family history were negative.

The patient was a short, fat woman who looked decidedly older than 42 years, with a harassed, anxious appearance. There was frequent trembling of the lips; the face was flushed and she wept readily. The eyes were large, very bright and prominent, the thyroid was palpable and there were many neck pulsations. There was a marked tremor and moisture of the hands and fingers. The pulse was 90, the blood pressure 176/112, the basal metabolic rate was plus twenty-eight per cent with a pulse of 100. The urine and blood count were normal, the weight 227 pounds and the general examination was negative.

The diagnosis here was premenopause hyperthyroidism and in addition to the three tablets of desiccated whole ovary to be taken daily, $\frac{1}{4}$ grain phenobarbital three times a day was ordered. She was restricted to a 1200 calories diet.

Two months later she stated that she felt much better and stronger and was not as nervous. The two menstrual periods were regular with a little more flow. There had been no headaches in the last five weeks. On examination her weight was 200.5 pounds, the blood pressure 164/100, pulse 76. There was only a slight tremor of the fingers and she looked much better and was not as tense and lachrymose as before. She was advised to discontinue the phenobarbital but to take three ovarian tablets daily.

Eight months later she stated that she was entirely well and had none of her former symptoms. Menstruation has been quite normal in all respects for the last six months.

On examination, she appeared placid, cheerful and in obvious good health; the thyroid was barely palpable, the eyes were normal and the face was not flushed nor was there any tremor or moisture of the hands. Her pulse was 70 and her weight 188 pounds. Her last basal metabolism test was done five months ago and was plus fourteen per cent. No further metabolism studies were considered necessary at this last visit and therapy was stopped until symptoms recurred. She had lost thirty-nine pounds in weight in nine months.

Case 4.—H. Z., aged forty-three, Para II. Her chief complaint beginning a year ago was the appearance of occipital headaches that came with increasing frequency so that in two months the pain was almost constant. The pain invariably began in the occipital region and radiated towards the vertex and also the back of the neck so that actually she suffered from a generalized head pain. Within two months her periods, altho they remained regular, became very profuse, with clots. There was severe pain in both lower abdominal quadrants before and during menstruation. A few weeks later she noticed that she was becoming "shaky," would cry readily and was very nervous. Soon there appeared frequent choking sensations and insomnia. All these symptoms became steadily worse but she continued to gain a little weight throughout the last year.

She had the usual childhood diseases and anemia (chlorosis?) as a young girl. There was severe dysmenorrhea until the birth of her first child. With both children, she had very long, difficult labours. She has had a trachelorrhaphy and hemorrhoidectomy. The family history is unimportant.

The patient was a short, slim, bespectacled woman

with an anxious look. The thyroid was palpable and there were many neck pulsations. There was a severe tremor of the wet hands. The general examination was negative. The pulse was 96, the blood pressure 140/84, blood count and urine examination were normal. The basal metabolic rate was plus seventeen per cent with a pulse of 88. The gynecological examination was negative.

The diagnosis here was premenopause hyperthyroidism. The patient was advised to take ten minims of Lugol's solution once daily and one-half grain of phenobarbital after meals, for eight days. Then both of these prescriptions were discontinued and she took one tablet of desiccated whole ovary after meals.

Three months later she reported that she felt very well, had no headaches and that her last two periods were normal. Her only complaint was the recent development of constipation. On examination, there were no neck pulsations, the hands were dry and without any tremor, the pulse was 68 and the anxious appearance was no longer present. She was advised to continue taking the ovarian tablets for another month.

This woman appeared at the clinic fifteen months after her last visit at our request. She stated that she had remained well without any recurrence of her former symptoms.

Comment

There is a striking similarity in both the signs and symptoms in each of these cases. All have definitely improved under similar therapy and the physical signs of thyroid overactivity have decreased proportionately. These cases well illustrate some of the fundamental concepts of endocrinology. There is an intimate relationship between all the internal glands but this relationship is particularly close between certain glands as for example the very close associations between the ovaries and the pituitary and also between the thyroid and the ovaries. A prolonged disturbance in one gland appears to force the related gland into an unusual behavior in an effort to maintain the former normal related activity of these two glands. Though the original disturbance is uniglandular, one eventually finds a pluriglandular dystrophy in many endocrine cases. It becomes important, therefore, to evaluate properly each glandular dystrophy and to determine whenever possible which is the primary offender in order to institute proper therapy. This is often very difficult because similar symptoms may be produced by different gland dystrophies, such as the excessive menstrual bleeding produced by either pituitary or thyroid disturbance.

In the cases reported, the signs and symptoms are typical of simple hyperthyroidism but they are nevertheless the results of a primary ovarian disturbance. In each the abnormal menstrual history preceded the

thyroid symptoms by an appreciable time interval and each was relieved by ovarian therapy. Nor can these cases be considered as recurring hyperthyroidism because there is no history in any of them of a previous similar occurrence. Eventually the thyroid symptoms predominated in the clinical picture but this is a frequent occurrence in polyglandular disturbances. Very often the gland secondarily involved produces a situation much more severe than the original difficulty. Although a basal metabolism estimation is only one piece of evidence, one cannot ignore repeated tests that are compatible with the other clinical findings in a case throughout its observation. To label these cases as examples of vasomotor disturbance does not solve the problem. What are the causes of this vasomotor disturbance? If one considers the patient's age and primary menstrual symptoms, he is forced to regard the ovarian dystrophy as the original cause of the syndrome.

Since glandular disturbances are usually functional in character, the therapy is of a substitution nature, that is, either the hormone or dessicated product of the affected gland is employed. In those cases where the thyroid overactivity produced excessive symptoms, patients were given very small doses of iodine, usually ten minims of Lugol's solution daily and small quantities of phenobarbital for ten days. All cases were treated with dessicated whole ovary given by mouth, though many eminent clinicians claim that oral therapy is entirely useless.

This entire problem will receive a more thorough discussion in a subsequent article on menopause therapy. For the present, it may be stated that in a clinical experience of hundreds of cases, very excellent results, as a whole, were obtained with oral administration of ovarian medication. In the very severe cases where the follicular hormone was given hypodermatically, it was found that fewer and less frequent injections were needed where oral ovarian therapy was also employed. One five grain tablet, which is equivalent to thirty-five grains of the fresh ovarian gland, was taken three times daily. The author does not pretend to explain the efficacy of this type of therapy but he cannot ignore results that are eminently satisfactory to the patients.

It is true that many of these patients had sufficient practical reasons for severe

psychological maladjustments. Each of the reported cases is typical. But it is certain that their maladjustments were not responsible for their signs and symptoms. For today they still have as many problems as before, they are still maladjusted but their original complaints with the accompanying signs and symptoms have disappeared. The only psychotherapy employed was the assurance to those patients who feared surgery that such a procedure would not be necessary.

These women will inevitably enter the menopause but experience has shown that the use of ovarian therapy when indicated in the premenopause period usually allows them to pass more gently into the climacteric without a recurrence of the thyroid symptoms and very often they have a milder, comparatively short period of the typical menopause complaints.

Many were definitely obese. The raised basal metabolic rates were disregarded and their diets were limited to 1200 calories. They invariably lost much weight, to their great satisfaction, and did not develop any additional symptoms.

The headache in the occipital region is one of the commonest symptoms of deficient ovarian activity and responds readily to ovarian medication.

Conclusions

1. Certain women in the few years before the menopause or at that time present signs and symptoms characteristic of thyroid hyperactivity.
2. Careful study demonstrates that this condition is secondary to an ovarian dystrophy.
3. The therapy must be centered on the ovarian disturbance. The oral use of dessicated whole ovary has given good therapeutic results.
4. In a reasonable length of time, the signs and symptoms disappear and eventually the climacteric is established, usually in a milder and shorter form.
5. These patients when obese can safely use a 1200 calories diet regardless of the raised basal metabolic rate. The benefits of a limited diet and a reasonable weight loss are probably additional factors that enhance their clinical improvement.

REPORT OF SKIN ABRASION INFECTED BY GONOCOCCUS

E. VAN CAMP, M.D.
BATTLE CREEK, MICHIGAN

The patient, J. E., ten years of age, was seen October 19, 1936, with a skin lesion two inches below the right knee. He gave a history of a slight skin abrasion about ten days previous to examination. The skin lesion did not bleed but exuded serum. Six days later it exuded yellow pus and a painful swelling developed in the right groin. When first seen the patient seemed only slightly ill, but he had a temperature of 102 degrees, and had a marked tenderness at the site of the lesion and inguinal gland.

He was not seen again until November 12. On account of gland involvement, a smear was taken to the City Health Laboratory, with the name and age of the patient, and site of lesion.

The report was gram negative intracellular diplococci. Other cultures were taken, one on Loeffler's media, which of course gave no growth of diplococci, but ruled out the micrococcus catarrhalis. On November 12 the lesion was 1.5 cm. in diameter with a raised rounded edge. It was completely covered with a yellow cheesy material 0.5 cm. thick. This was not adherent and when removed left a red surface with only pin point hemorrhages. The inguinal gland was about 3 cm. in diameter.

The skin healed with antiseptic treatment, with even more rapid recession of the gland inflammation. Two weeks' treatment seemed to effect a cure.

The patient's family is much above the average in intelligence, morals and cleanliness. The school he attends is our model school. No clue has been found to trace the source of infection.

THE DEPARTMENT OF POSTGRADUATE MEDICINE

of the

UNIVERSITY OF MICHIGAN,

WAYNE UNIVERSITY COLLEGE OF MEDICINE

and

THE MICHIGAN STATE MEDICAL SOCIETY

Progressive Five-Year Program of Postgraduate Study
1937 Schedule

Short, Intensive Courses to be given in the spring of 1937

Ann Arbor Center

- | | |
|--|---------------------------|
| 1. Electrocardiographic Diagnosis | April 5-10, inclusive |
| 2. Diseases of Metabolism | April 12-16, inclusive |
| 3. Ophthalmology and Otolaryngology | April 26-May 1, inclusive |
| 4. Diseases of the Blood and Blood-forming Organs
(One day each week for eight weeks) | April 8-May 27 |
| 5. Surgery (One day each week for eight weeks) | April 1-May 20 |

Detroit Center

- | | |
|---|-------------------------|
| 6. Pediatrics | April 19, 20 and 21 |
| 7. Proctology | April 26, 27, and 28 |
| 8. Diseases of Genito-Urinary Tract | April 29, 30, and May 1 |
| 9. Gynecology, Obstetrics and Gynecological Pathology | May 3 to 8, inclusive |
| 10. Practitioners' Course | May 10 to 15, inclusive |

The annual fall extra-mural courses will begin in September. The program will be announced later for the following centers:

Bay City
Battle Creek-Kalamazoo, jointly
Flint
Grand Rapids

Lansing-Jackson, jointly
Traverse City-Manistee-Cadillac-Petoskey,
jointly
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OF THE

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FEBRUARY, 1937

*"Every man owes some of his time to the up-
 building of the profession to which he belongs."*

—THEODORE ROOSEVELT.

EDITORIAL

THE NATIONAL PROGRAM FOR CONTROL OF VENEREAL DISEASES

THE proceedings of the recent three-day conference on the control of venereal diseases held at the call of Surgeon General Thomas Parran of the United States Public Health service, have been well summarized in an editorial in the *Journal of the American Medical Association* of January 9, 1937.

It is of utmost importance that we realize that such a program for the control of venereal diseases is upon us and that we place ourselves in a position to guide its medical application in Michigan. No one can appreciate the need for such a program better than the medical profession or more fully realize the value of dispelling the spirit of taboo that has surrounded the frank discussion of venereal diseases. We are sure

the medical profession is willing and anxious to coöperate and play their necessary role in this campaign. We would like to feel that we have, however, a guiding hand in this matter, and it is urgently necessary that immediate steps be taken to organize a plan suitable to both the United States Public Health Service and to our State Health Commissioner in which the practicing physician will be an important factor.

In the conference referred to, the section on public health control stressed the necessity of carrying treatment facilities to all persons of all economic strata and although it was declared that whenever and wherever possible patients should be treated by family physicians in the usual manner and that the personal relationship of patient to physician should be maintained wherever possible, the section reported that in its judgment the treatment of indigent and border line patients in clinics would be necessary. It is hoped that in as far as possible family physicians in Michigan may be given an opportunity of caring for such indigent and border line cases rather than commit themselves further to the clinic policy. The State Medical society is trying to work out such a plan with the speed urgent to the occasion.

The high lights of this control program will revolve about three main divisions: (1) educating the public; (2) finding infectious cases; (3) proper treatment of syphilitic patients.

The public educational program will not be a direct problem of the medical profession. Syndicated newspaper articles and editorials are already being liberated. Other articles are to be expected in the popular monthly periodicals. Frank discussions of treatment standards are to be expected in such articles. The public is to be instructed not alone as to the incidence and nature of syphilis but as to drugs used and the minimum amounts of treatment necessary to secure the maximum in permanent

arrest or "cure." It is therefore necessary that we be well acquainted with such standards. The special Article by Dr. H. N. Cole on "The use of Antisyphilitic Remedies" in the *Journal of the American Medical Association* of December 26, 1936, is highly recommended as a brief outline of these standards.

Let us be alive to the importance of being prepared. Your County Medical Society, as well as this JOURNAL will keep you in touch with developments.

PREVENTION OF AUTOMOBILE ACCIDENTS

THIS is in a double sense a medical subject. The physician is called in to make the necessary repairs to the human machine; and, on the other hand, if the number of accidents is to be diminished, the medical profession must help make the selection of candidates given drivers' licenses.

In industry, preference is given to the young adult whose reaction-time is quicker than that of a man past fifty years of age. This need not apply to the driver of an automobile. The caution of the older driver more than compensates for his slower reaction-time. Other things being equal, it is a question if the nervous driver is not the greater menace to road safety. He gets up late in the morning and starts out late for his destination, hoping to make up for lost time on the road. He rushes along at a rapid rate of speed and takes no precaution for a possible emergency, in the event of which catastrophe is sure to result.

Then there is the driver who does not know when he has had sufficient cocktails or highballs.

"When night
Darkens the streets, then wander forth the sons
Of Belial flown with insolence and wine."

Of course, it scarcely needs repeating that once the mentality is dimmed, the reaction time is entirely destroyed and anything may, and it usually does, happen. The drunk driver, however, is the problem, not for the medical profession, but for the courts.

The physician who would forego some form of medical protective insurance would be foolhardy indeed. What can be said of the driver who is unprotected by insurance for personal liability or property damage, and yet how many take a chance! If the risk of being uninsured was exclusive to the careless driver, little could be said, but how many drivers are there who are financially unable to take care of damage, either personal or property, resulting from their carelessness? No one should be allowed to drive an automobile on public highways whose machine is not insured to take care of any damage that might result from carelessness, either on the part of the driver, or the person injured. The pedestrian cannot be always exonerated.

Then again, the greatest single factor in the promotion of safety on streets and highways is courtesy or good manners. If drivers and pedestrians were as courteous on the streets as, let us hope, they are in their own homes, there would be very few casualties in comparison to the number of past few weeks. It seems that the automobile has brought to the surface all the bad manners of which some persons are capable. Consideration for the other fellow and strict attention to traffic signals, safety zones and other street signs, on the part of both pedestrian and driver, will accomplish more than any expensive program of survey and street-widening that can be devised. Let's use common sense!

READ YOUR JOURNALS

ONCE a year, the editor is called upon to make a report of his editorial duties to the council of the society. It is always a somewhat difficult matter to produce anything in the way of a report, that should not be already familiar to the readers of the JOURNAL. In a sense, the contents of each number of the JOURNAL is a report. However, this gives an opportunity, at least, to surmise as to what extent the JOURNAL is read. This implied doubt on our part, that the JOURNAL may not be read by everyone, is occasioned by questions put to the editor, the answers to which would be perfectly obvious to anyone who read over the JOURNAL each month.

A great deal of effort as well as expense

goes into each month's JOURNAL. The JOURNAL is an integrating factor in Michigan medicine. Without it, no county medical society could possibly know what another county society is doing, nor could the counties know what the elected and appointed officers of the state medical society are doing. There never was a time in the history of medicine when organization meant more to each individual doctor, but organization will mean very little unless each member of the society is alive to the purposes of organized medicine. The present year is, if anything, more important than any in the immediate past. It is a legislative year, and much legislation of importance to the medical profession as well as the people at large on health matters is likely to come up. The JOURNAL endeavors to keep in touch with medical legislation as it comes up in the legislature, as well as to report the essential transactions of the council, executive and standing committees.

The influence of the JOURNAL might be broadened were the members to have it sent to their homes. This would make it available to the doctor's wife who is doubtless a member of the Woman's Auxiliary. The Woman's Auxiliary has assumed nationwide proportions. It, in a sense, parallels organized medicine. The members of the Woman's Auxiliary should also have access to the JOURNAL.

WHO HAS THE LAST WORD?

CERTAIN cases which lack in clearness of diagnosis are referred by the clinician to the roentgenologist. The roentgenologist is presumed to be able to make a biopsy without undue discomfort to the patient. If his examination is carefully made, in certain selected cases, it is difficult to controvert his findings. However, when the case goes on to the general surgeon, or to the special surgeon, each feels that he has the final say, so far as the clinician and roentgenologist are concerned. However, the surgeon himself is not final since the accuracy of his findings depend upon his knowledge of gross pathology. The specimen is finally turned over to the pathologist.

In the course of human events, however, all things may be questioned, even the findings of the pathologist. Dr. Lewis Greg-

ory Cole, of New York, who is a pioneer roentgenologist of note, is not willing to concede infallibility even to the pathologist. In an article, double column, twenty-seven pages in length, in the December number of *Surgery, Gynecology and Obstetrics*, he scores what he calls the pathological yardstick. It happens that Dr. Cole sent eight microscopic sections of organic gastric lesions, chosen from surgery and autopsy specimens, to twenty-two well-known pathologists, who willingly complied with his desire to check on their findings. Each pathologist was asked to examine identical sections, to answer three questions and to permit their answers to be published. Dr. Cole's questions were as follows: (1) Is the lesion malignant? Yes or No? (2) What is the type of lesion? Carcinoma, sarcoma, etc.? (3) On what criteria did you base your opinion? The suggested criteria are (a) arrangement of cells, (b) size and shape of cells, (c) nuclear changes, (d) changes in chromosomes, (e) manner in which cells take stain, and (f) invasion of adjacent structure, or other.

The article is a detailed study which doubtless many of our surgical readers have already perused. Dr. Cole's summary and conclusions are as follows:

A. In about one-quarter of the cases of gastric lesions, there was a difference of opinion among representative pathologists as to whether the lesion was malignant, and a still greater diversity of opinion as to whether the lesion was a carcinoma, a sarcoma, or some other neoplasm.

B. Opinions vary even more when they are based on a study of microscopic sections that are cut and stained in a routine manner, especially when only a single stain is used.

C. Ewing believes that the difference of opinion occurs in about 20 per cent of the cases.

D. Routine microscopic sections as cut and stained in more than 90 per cent of the institutions are inadequate to rule out the presence of a gastric cancer or neoplasm; a positive diagnosis of cancer may be made on such sections, but not a negative diagnosis.

E. The pathologists mentioned rate above the average and, if there is as much diversity of opinion among them as herein shown, there would be an even greater difference of opinion among those less experienced.

F. This difference of opinion as to the pathology present in gastric lesions astonishes the internist and the surgeon and some pathologists, but why should it?

G. A similar difference of opinion as to pathology in bone tumors has been known to exist since Codman started the bone sarcoma registry.

H. Ewing now maintains that the pathologist en-

counters the same difficulty in the diagnosis of gastric lesions that he is known to have encountered in the diagnosis of bone lesions.

This study should have the effect of making all diagnosticians, whether clinicians, roentgenologists, surgeons or pathologists, more charitable to one another.

NEW DEVELOPMENTS IN THE FIELD OF COMMON INDUSTRIAL POISONS*

By ALICE HAMILTON, M.D., Sc.D.

U. S. Department of Labor, Division of Labor Standards

Washington

This paper discussed some of the most recent findings in the field of industrial toxicology, especially with regard to some of the more familiar poisons. That lead plays a causative rôle in hyper-tonia, in gastric and duodenal ulcer, in diseases of unknown etiology, such as multiple sclerosis, cirrhosis of the liver, exophthalmic goitre, spontaneous gangrene of the feet, is maintained in the recent literature. Benzol poisoning is found to be characterized not always by aplasia of the bone marrow with leukemia. The early detection of benzol poisoning has been much facilitated by Yant's new test. The homologues of benzol, toluol and xylol, appear to have a less negative character than has been assumed.

The recent literature contains several reports of severe and sometimes fatal poisoning from carbon tetrachloride, with lesions that are sometimes almost exclusively in the liver, or again in the kidneys. Several atypical cases are described. Trichlozethylene is another member of this group which, in several European countries, has given rise to serious trouble.

Hydrogen fluoride is an industrial agent of increasing importance and new light has been thrown on the effect of the animal body of long-continued exposure to air containing apparently safe dilutions. Mercurialism is the subject of study on a large scale in Russia, where new theories have been advanced with regard to its real nature. Finally, the new findings connected with possible dangers in electric welding are discussed.

*Address delivered before the Wayne County Medical Society, Detroit, Monday Evening, January 11, 1937.

MEDICO - LEGAL DEPARTMENT

THE DOCTOR ON THE WITNESS STAND

By E. A. WITTWER, M.D., LL.B.

The doctor who is summoned as a witness should keep in mind a few simple rules, so that he may appear to his best advantage while on the witness stand:

1. Make an arrangement with your client for a proper fee for an investigation of the case and for your opinion of the facts he may set before you, and refuse if you are not wholly satisfied as to the merits of the case.
2. Make yourself thoroughly familiar with all the facts upon which you are to testify.
3. After you are satisfied with the facts bearing upon the case, refresh your memory by the opinion held by standard writers in relation to the subject.
4. Interchange views with experts on the other side.
5. Refuse to give expert testimony if you have the least doubt as to the correctness of your opinion founded upon the facts advanced.
6. Let your bearing be dignified and grave.
7. Use plain and simple language.
8. Be explicit and definite as to your facts.
9. Your testimony is taken down on paper, recorded and printed, and you may be called upon again in a reinvestigation at a subsequent trial so it is essential that you should understand clearly each question put to you.
10. Answer clearly each question, volunteer nothing. You may appeal to the court if "yes" or "no" give only part of the truth, and he will sustain you.
11. Do not be irritated by the cross-examiner.
12. Be careful, honest, and take no offense. It is the wisest witness that knows when to say "I do not know."

If asked if the work of a certain writer is an authority and you assent to it, quotations may be cited in opposition to the facts you may have given. In science, facts themselves are the only authority and a book simply represents an attempt to present these facts. The law allows you to refresh your memory by reference to your original notes, but you may not read them to the court.—*Bay City Medical Bulletin*.

MEDICAL PHASES OF WELFARE AND RELIEF LEGISLATION

Following are the five points proposed by the Committee on Medical Economics of the Michigan State Medical Society for inclusion in the ten bills being drafted by the Michigan Welfare and Relief Study Commission:

1. The conservation and maintenance of the public health is a necessary function of our government.
2. Medical care shall include: Home, Office, Hospital Care, Bedside Nursing Care, and Dental Care for those families that are receiving relief and those families whose income is on a mere subsistence level.
3. The State Welfare Administration, responsible for the administration of Welfare funds to lo-

cal relief administrations, shall establish a Division or Department charged with the responsibility of supervising all medical activities herein mentioned and supervised by a registered and licensed Doctor of Medicine.

4. Each County or District shall have an advisory committee, composed of members of the various professional groups to advise on all disputes, determination of policies, procedures, etc.
5. Hospitalization of the afflicted adult and afflicted child shall be administered through the local welfare unit in each County or District in the same manner as any other form of relief. Uniformity, record forms, and auditing of bills shall prevail throughout the State.



The following is the third of a series of brief articles on the business side of a physician's practice. They offer pithy suggestions and aids to enable the doctor to master, with more ease, a phase of his daily work which is often distasteful but always necessary.

THE PATIENT'S ACCOUNT

ALLISON E. SKAGGS and HENRY C. BLACK

THE primary purpose of the patient's account is to record the amounts charged and paid, and the balance due. Other important information includes dates of statements sent, arrangements for settlement, who is responsible for the account and where he is employed. It may seem unnecessary to devote space here to the discussion of such a simple procedure, but investigation shows that the majority of doctors waste either time through cumbersome methods or money through inadequate information.

In order to make this information readily available it should be possible to transfer paid-up accounts to another ledger as soon as paid. This cuts down the time required for looking up balances, posting and sending statements. These paid-up accounts should be so filed that they are easily accessible for reference or for transferring back to the current ledger when the patient has more service.

Regardless of the type of card or sheet used, the accounts should be filed alphabetically with enough indices so that there are not more than fifteen or twenty accounts to a section. This facilitates matters greatly both for the doctor and the office girl, yet a well indexed ledger in a doctor's office is rare.

Patients' accounts are potential "money in the bank" and deserve the same careful recording that your drug house makes of your bill with them. Charges, if not recorded daily are apt to be forgotten entirely. The efficiency of the patient's account itself directly affects the percentage of collections because:

First, since the doctor's office is primarily to care for the sick, clerical work must be handled with dispatch or it is neglected.

Second, complete information as outlined in the first paragraph provides the best basis for extending credit on subsequent services.

Third, the promptness with which transactions are recorded is reflected in the promptness with which patients pay their bills. Balances become readily available, statements more regular, and other collection procedures are less frequently required.

MISLEADING PROPAGANDA

Recently an incorrect statement appeared in a reputable national weekly relative to the stand of the Michigan State Medical Society on health insurance. The impression left was that the State Society was in opposition to the American Medical Association.

The Michigan State Medical Society is not now and never has been in favor of socialized medicine or compulsory sickness insurance. In 1934, its Committee on Medical Economics presented a mutual health service plan to the House of Delegates of the State Society as a committee report, upon which no action has been taken.

Since 1931, the Michigan State Medical Society has sponsored studies costing \$20,168.96 designed to perfect both the distribution of medical care and its high quality. From its comprehensive surveys, it can find no existing evidence of comparable data to show that a socialized medicine system would work in Michigan, but it has discovered such a program would be deficient in quality, as demonstrated abroad where socialized medicine is known as "second class" service. The physician has an obligation to maintain the *quality* of medical care.

The magazine in question was informed of these facts and immediately agreed to correct the erroneous impression given by its article.

President's Page

"To Protect the Welfare and Health of the People"

THE Proposed Basic Science Bill is recommended to the Michigan Legislature with the above intent and purpose in its first Section.

Section 2 provides for the appointment of a board of examiners in the basic sciences—six laymen, full-time professors *who are not engaged in the practice of healing*. Sections 3 and 4 pertain to the organization of the Board.

Section 5 provides for examinations in basic sciences as a prerequisite to eligibility to practice the art of healing in Michigan.

Section 6 provides that no examining board for any system of healing shall examine an applicant unless he first presents a certificate of eligibility in the basic sciences.

Sections 7, 8 and 9 refer to the powers and duties of the Board, relative to administering oaths, revoking certificates of eligibility obtained through fraud, et cetera, and the punishment of offenders against this act.

Section 10 lists the basic sciences as anatomy, physiology, pathology, bacteriology, public health and hygiene, and chemistry. It defines terms, and gives the exemptions to the act.

Section 11 covers the financing of the Board.

Section 12 states: *"This act shall not apply to any legally registered and licensed person engaged in the practice of healing on the effective date of this act."*

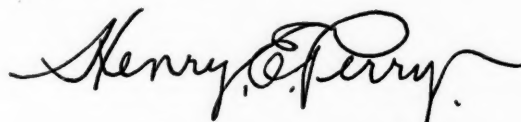
Section 13 explains that the certificate of eligibility in the Basic Sciences is an additional qualification, and not a substitute for the legal requirements set for the examination in any of the branches of the healing art.

Section 14 provides that *"the board of examiners in the basic science shall, in no manner, discriminate against any system or branch of healing. No applicant shall be required to disclose the professional school he may have attended or what system of healing art he intends to pursue. The examination papers shall not disclose the name of any applicant, but shall be identified by numbers."*

Sections 15 and 16 are the usual saving clause, and the repeal of all acts inconsistent with the provisions of this act.

Those now in practice are not affected by the proposed basic science bill (Section 12), which does not, in any manner, discriminate against any system or branch of healing (Section 14). This proposal is fair and impartial, a public health measure to raise the standards of all who treat the sick, insuring uniform health safeguards to all the families of Michigan.

What are you doing to help pass this bill designed "to protect the welfare and health of the people of this State"?



President of the Michigan
State Medical Society

DEPARTMENT OF SOCIETY ACTIVITY

L. FERNALD FOSTER, M.D., Secretary

Council Chairman's

- - - Communication

TO THE DEFENSE OF RIGHT AND GOOD

Minute Men of Medicine:

THE Legislature is now in session in Lansing. Over one thousand bills will be introduced during February, March, April and May. You will have a three-fold interest in many of these matters:

- (a) As a citizen.
- (b) As a physician.
- (c) As a protector of Public Health (Hippocratic Oath).

The proposals of major importance to you will be:

1. The Basic Science Bill.
2. Relief and Welfare Bills.
3. Occupational Disease Bill.
4. Group Hospitalization (Hospital Insurance) Bill.
5. Bills against health safeguards.

The Michigan State Medical Society will keep you well informed of legislative activities. (You, in turn, will help materially by transmitting pertinent information to the Executive Office.) When emergencies arise, you will be called upon for necessary action. We ask that you respond immediately, that you live up to your duty as a Minute Man, and that you rush to the defense of what is right and good.

P. R. URMSTON, M.D.,
Chairman, The Council, M.S.M.S.

"UNEMPLOYMENT COMPENSATION"

UNDER the Federal Unemployment Compensation Act, unless a physician has eight or more employees he is exempt from same and is not subject to the payroll tax imposed by Title No. 9 of the Act.

Under the Michigan Unemployment In-

surance Act, placed on the statute books December 23, 1936, an employer is allowed an exemption of \$6,000 of payroll per annum. The Michigan law, which governs exclusively in Michigan, provides for only an employer tax, not an employee tax. The rate of 1936 payrolls is 0.9 per cent, payable on or before January 31, 1937. The rate on 1937 payrolls will be 2 per cent payable on or before January 31, 1938. The Michigan tax is payable to the Unemployment Compensation Commission of Michigan in Lansing, which forwards same to the Federal government. The Federal tax is payable to the Collector of Internal Revenue (same as Income taxes), and the amount paid to Michigan is offset against the Federal tax, up to 90 per cent of the Federal tax.

It is believed that the great majority of physicians will not be affected by the Unemployment Compensation phase of the Social Security Act, due to the exemption of \$6,000 payroll per annum, and also because few physicians have eight or more on their staff.

The Social Security Board has published three Information Service circulars which provide information about the features of the Act. Write Robert Huse, Business Information Division, Social Security Board, Washington, D. C., for copies.

THE PHYSICIAN— A PUBLIC SPEAKER

LIKE many other of our traditions it has seemed that a physician could not present any subject, other than one on scientific medicine, to a lay audience. In recent years so many vital economic problems have arisen in the practice of medicine that many of our colleagues have been forced to either discuss or debate them before lay groups. Much to their surprise they have discovered that they have not only made fine presentations of their subjects but that they have derived a refreshing satisfaction from the experience.

The physician never before has had so many important subjects to discuss with lay groups as he has today and there has never been such a need for discussion of these subjects as now exists.

We, in Michigan, could well afford to make appearances on such subjects as the Basic Science Bill and the Socialization of Medicine. They are subjects which every physician should thoroughly understand and be capable of discussing. Your State Society has furnished much data on these subjects and more is available at any time. No one is as fitted to discuss these subjects as intelligently as the physician and if the public is to be adequately informed it is the obligation of the medical profession to furnish this information.

The time has come when every physician must ascend the rostrum or appear before the microphone and without prejudice or bias, publicize the subjects which affect not only his profession but which are so vital to the public health.

The public is entitled to honest information on the many problems of organized medicine. They have looked to the medical profession, but too often have had to receive their information from sources not qualified to provide it.

Have You Assumed Your Obligation?

IMPORTANT COMMITTEE REPORTS

"To the end that a united stand be taken at all times by these three groups in matters of mutual interest," a special Joint Committee of five, two from the Michigan State Medical Society, two from the Michigan Hospital Association, and one from the Michigan Association of Roentgenologists has been appointed to present the medical and hospital viewpoint toward and the solution of the Crippled Child, the Afflicted Child and the Afflicted Adult problems to the appropriate state or county governmental agencies.

Read the minutes of the Joint Meeting of the Committee Studying Fee Schedules A, B, C, and D, with the Liaison Committee with the Hospital Association and with representatives of the Michigan Hospital Association, held January 8, 1937. (The minutes are published on page 120.)

The minutes of other important committee meetings are also published in this is-

sue—see the report of activities of the Advisory Committee on Syphilis Control Program, the far-reaching action of the Committee on Medical Economics at its meeting of December 9, the important study of the Committee on Maternal Health, and the programs of the Legislative Committee and the Advisory Committee on Postgraduate Education.

Your State Society is active—very active—in your interests, and the interests of better public health and medicine in Michigan.

THE SPREAD OF BASIC SCIENCE

The introduction of Basic Science legislation during the current year has been under consideration by the State Medical Associations of California, Colorado, Florida, Georgia, Kansas, Montana, Michigan, No. Dakota, Oklahoma, Vermont and Wyoming. This, in addition to the states already having Basic Science Laws, represents a good percentage of the United States, and is further argument for the passage of such a law by the Michigan Legislature—before this state becomes the dumping ground for uneducated and incompetent healers.

HILLSDALE COUNTY IN SECOND COUNCILOR DISTRICT

The Council of the Michigan State Medical Society, at its Midwinter Meeting of January 20-21, 1937, took action by unanimous vote to transfer the Hillsdale County Medical Society from the Third to the Second Councilor District, in accordance with the request of the Hillsdale County Medical Society. This action was taken under authority of Article 5, Section 1 of the Constitution of the Michigan State Medical Society.

COUNCIL AND COMMITTEE MEETINGS

1. *January 8, 1937*—Committee on Fee Schedules A, B, C, D, and Liaison Committee with Michigan Hospital Association—Wayne County Medical Society Building, Detroit—6:30 p. m.
2. *January 19, 1937*—Legislative Committee—Hayes Hotel, Jackson—4:30 p. m.
3. *January 20-21, 1937*—The Council of the Michigan State Medical Society—Hotel Statler, Detroit.
4. *January 24, 1937*—Maternal Health Committee—Hotel Statler, Detroit—11:00 a. m.

SOCIETY ACTIVITY

ANNUAL REPORT OF CERTIFIED PUBLIC ACCOUNTANTS FOR 1936

WE HAVE made an examination of the balance sheet of MICHIGAN STATE MEDICAL SOCIETY as at December 26, 1936, and of the statement of income for the fiscal year ended at that date. In connection therewith, we examined or tested accounting records of the Society and other supporting evidence, and obtained information from its Executive Secretary and other employees. We also made a general review of the accounting methods and of the operating and income accounts for the year, but we did not make a detailed audit of the transactions.

In addition to our examination of the balance sheet and statement of income, we made certain test checks of the recorded cash transactions and other data supporting the accounts and records, as herein-after outlined. We also reviewed the cash receipts and disbursements in the funds administered by the Society.

The Society was organized as a corporation not for pecuniary profit on September 17, 1910, under the laws of the State of Michigan. It is affiliated with the American Medical Association and charters county medical societies within the State of Michigan. The purpose of the Society is the federation and protection of the medical profession and the extension of medical knowledge. In the furtherance of these purposes the Society publishes THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY.

Financial Analysis

The balance sheet included herein, in our opinion, fairly presents the position of the Society as of December 26, 1936, on the basis outlined in this report. The following summary shows a comparison of the assets and liabilities at the beginning and end of the year:

	Assets		
	Dec. 26, 1936	Dec. 28, 1935	Increase Decrease
Cash	\$ 6,840.66	\$ 6,943.90	\$ 103.24
Notes and accounts receivable	875.89	563.20	312.69
Inventory	918.00	1,558.29	640.29
Securities—at cost, less allowance	31,701.00	24,909.00	6,792.00
	\$40,335.55	\$33,974.39	\$6,361.16
	Liabilities		
	Dec. 26, 1936	Dec. 28, 1935	Increase Decrease
Accounts payable	\$ 2,750.41	\$ 685.73	\$2,064.68
Liability for fund administered	1,031.38	1,038.31	6.93
Unearned income	830.00	1,270.00	440.00
Reserve for Medico-Legal Defense Fund	15,984.84	15,413.24	571.60
Net worth	19,738.92	15,567.11	4,171.81
	\$40,335.55	\$33,974.39	\$6,361.16

Of the increase in the net worth in the amount of \$4,171.81, \$1,197.50 is due to a reduction in the allowance necessary to reduce the value of securities held in the general fund of the Society to quoted market values.

Notes receivable for dues represent the uncollected portions of notes taken in settlement of 1931, 1932, and 1933 dues. No collections on these notes were received during the year ended December 26, 1936.

Accounts receivable from advertisers and exhibitors were analyzed as to date of charge and are classified in comparison with the balances at December 28, 1935, as follows:

	Dec. 26, 1936		Dec. 28, 1935	
	Amount	Per Cent	Amount	Per Cent
October, November, and December	\$ 772.26	58.44	\$568.92	60.04
July, August, and September	198.75	15.04	28.50	3.01
January to June, inclusive	13.00	.98	72.91	7.70
Prior to January 1	337.58	25.54	277.17	29.25
TOTAL	\$1,321.59	100.00	\$947.50	100.00

FEBRUARY, 1937

The balances due from county societies represent dues collected for the Society by two county societies and impounded in depositary banks. As funds are released by the banks, the Society's share will be forwarded by the county societies. No payments on these accounts were received during the year.

Accounts receivable for medical histories sold by the Society in prior years in the amount of \$86.40 were written off as uncollectible.

Based upon our analysis of the notes and accounts and conference with the Executive Secretary as to their collectibility, it is our opinion that the allowance of \$625.00 is sufficient to care for losses anticipated at the date of this report.

The inventory represents 306 sets of the "Medical History of Michigan," a two-volume work published by the Society several years ago. The inventory value has been reduced to \$3.00 per set by a charge against income in the amount of \$589.66.

An exhibit of securities owned is included in a later section of this report, which exhibit sets forth the par value, cost and quoted market values at December 26, 1936. Unlisted securities have been valued from information furnished by brokers as to the current bid and sales prices. During the year, \$3,000.00 par value of bonds of the Pennsylvania Railroad Company, carried in the general fund, were called at a price slightly in excess of their cost to the Society. Of the proceeds, \$2,015.00 was invested in \$2,000.00 par value of bonds of the Central Illinois Public Service Company. In order that the securities in the Medico-Legal Defense Fund might approximate the Medico-Legal Defense Fund reserve, \$4,813.75 of the Society's monies was invested in securities for the benefit of the Medico-Legal Defense Fund. Matured coupons on bonds not in default which were not cashed at December 26, 1936, have been included at par value, but no other accrued interest is included in the balance sheet.

As far as we could ascertain, provision has been made for all liabilities at December 26, 1936.

We have included herein a statement in summarized form of the receipts and disbursements of the fund administered for the Joint Committee on Public Health Education.

Collections of 1937 dues have been shown as unearned income and, in our opinion, represent income applicable to the ensuing year, except that portion which will be credited to the Medico-Legal Defense Fund when it is determined the share of the 1937 dues that shall be allocated to that fund.

A separate exhibit included herein shows in summary the changes in the Medico-Legal Defense Fund during the year. Attention is directed to the fact that disbursements of this fund exceeded receipts in the amount of \$1,047.90. During the year, only fifty cents of each member's annual dues were credited to this fund. During the previous fiscal year, \$1.50 of each member's annual dues was credited. However, a reduction of \$1,619.50 in the reserve to reduce securities of this fund to quoted market values resulted in a net increase of \$571.60 in the Reserve for Medico-Legal Defense Fund.

Surety bonds on officials and an employee of the Society at December 26, 1936, were as follows:

Medical Secretary	\$15,000.00
Treasurer	35,000.00
Executive Secretary	5,000.00
Bookkeeper	5,000.00

Operations

We have made an examination of the statement of income and expense for the fiscal year ended December 26, 1936, and in connection therewith we examined or tested accounting records of the Society and other supporting evidence and obtained informa-

SOCIETY ACTIVITY

tion and explanations from the Executive Secretary and bookkeeper; we also made a general review of the accounting methods and of the operating and income accounts for the year. The scope and extent of our tests of the detail of transactions during the year are outlined in a later section of this report.

A statement comparing the net income for the fiscal year ended December 26, 1936, with the net income for the prior year and a comparative statement of expenses for the two years are included herein.

The increase in the income for the year over the income for the previous year results primarily from three factors: an increase in the annual dues from \$8.50 per year to \$10.00 per year, a decrease in the portion of annual dues allocated to the Medico-Legal Defense Fund from \$1.50 per member to \$.50 per member, and an increase in advertising income of the JOURNAL.

Increased activities of the Society during the year are responsible for increased expenses classified as administrative and general and society activities. Committee expenses decreased in total as a result of a large decrease in the expenses of the Legislative Committee. The expenses in connection with the JOURNAL increased approximately in proportion to the increased income attributable to that magazine.

Scope of Examination

The scope and nature of our examination and the extent of the tests of the detail transactions are outlined in the following comments:

Cash on hand was counted on the morning of December 28, 1936. Cash on deposit was verified by reconciliation of the amount reported by the depository bank to the amount shown herein. Recorded cash receipts for several months of the year were

traced to the deposits shown by the bank statements on file. The recorded cash disbursements for three months selected by us were compared with canceled bank checks, invoices and other memoranda. To the extent of the tests made no irregularities were disclosed.

Notes receivable were inspected by us during the course of our examination. Accounts receivable were found to be in agreement with trial balances of the individual accounts. We did not correspond with any of the debtors to confirm the correctness of the book records.

Securities owned were inspected by us and market quotations were obtained to ascertain their approximate market value at December 26, 1936.

We did not correspond with creditors to verify the liabilities of the Society, but we reviewed the receipts and disbursements of the Joint Committee on Public Health Education and of the Medico-Legal Defense Fund.

In addition to the tests heretofore outlined we tested the amount of dues collected by comparison with the record of membership certificates issued and with other membership records. Interest received was verified by inspection of unclipped coupons. Tests were made of advertising income by comparison of billings for advertising with space used in several issues of the JOURNAL. We also reviewed the items charged to the major expense accounts during the year.

In our opinion, based upon our examination, the accompanying balance sheet and statement of income fairly present the position of the Society at December 26, 1936, and the results of its operations for the year.

ERNST & ERNST,
January 16, 1937. *Certified Public Accountants.*

BALANCE SHEET MICHIGAN STATE MEDICAL SOCIETY DECEMBER, 26, 1936

Assets		
Cash		
On hand.....	\$ 42.73	
On deposit—Lansing National Bank.....	1,797.93	
Certificate of deposit—Lansing National Bank.....	5,000.00	
		\$ 6,840.66
Notes and Accounts Receivable		
Notes receivable for dues.....	\$ 87.50	
Accounts receivable:		
Advertisers and exhibitors.....	\$ 1,321.59	
County societies.....	91.80	
	1,413.39	
	\$ 1,500.89	
Less allowance for doubtful.....	625.00	
		875.89
Inventories		
"Medical History of Michigan".....		918.00
Securities		
Stocks and bonds—at cost.....	\$45,253.75	
Less allowance to reduce to quoted market values.....	13,917.75	
	\$31,336.00	
Uncashed matured coupons on bonds not in default.....	365.00	
		31,701.00
		\$40,335.55
Liabilities		
Accounts Payable		
For current expenses, etc.....	\$ 2,738.91	
Advance for reprints.....	11.50	
		\$ 2,750.41
Liability for Funds Administered		
Couzens' Foundation.....	\$ 39.37	
Joint Committee on Public Health Education.....	992.01	
		1,031.38
Unearned Income		
Dues for the year 1937.....		830.00
Reserve		
For Medico-Legal Defense Fund.....		15,984.84
Net Worth		
Balance at December 29, 1935.....	\$15,567.11	
Net income for the year ended December 26, 1936.....	2,974.31	
Reduction in allowance to reduce securities to quoted market values.....	1,197.50	
		19,738.92
		\$40,335.55

This balance sheet is subject to the comments contained in this report.....

SOCIETY ACTIVITY

INCOME AND EXPENSE

MICHIGAN STATE MEDICAL SOCIETY

Income

	FISCAL YEAR ENDED		
	Dec. 26, 1936	Dec. 28, 1935	Increase Decrease
Membership fees	\$29,443.76	\$19,528.29	\$ 9,915.47
Journal subscriptions	5,681.92	5,477.09	204.83
Advertising sales	10,048.55	8,051.31	1,997.24
Reprint sales	1,559.81	1,687.75	127.94
Interest received and profit on sale of securities.....	1,291.80	932.89	358.91
Journal cuts sold.....	154.45	279.46	125.01
Miscellaneous income	10.87	30.30	19.43
	<u>\$48,191.16</u>	<u>\$35,987.09</u>	<u>\$12,204.07</u>

Expenses—As Shown By Exhibit

Administrative and general office.....	\$15,857.10	\$10,001.68	\$ 5,855.42
Society activities	7,028.03	4,541.34	2,486.69
Committee expenses	5,479.82	6,194.58	714.76
Journal expenses	16,193.76	14,383.24	1,810.52
	<u>\$44,558.71</u>	<u>\$35,120.84</u>	<u>\$ 9,437.87</u>

Other Deductions

Bad accounts charged off and provided for or compromised, less recoveries.....	\$ 68.48	\$ 143.30	\$ 74.82
Adjustment of inventory valuation.....	589.66	....	589.66
	<u>\$ 658.14</u>	<u>\$ 143.30</u>	<u>\$ 514.84</u>
	<u>\$45,216.85</u>	<u>\$35,264.14</u>	<u>\$ 9,952.71</u>
NET INCOME	<u>\$ 2,974.31</u>	<u>\$ 722.95</u>	<u>\$ 2,251.36</u>

EXPENSES

MICHIGAN STATE MEDICAL SOCIETY

	FISCAL YEAR ENDED		
	Dec. 26, 1936	Dec. 28, 1935	Increase Decrease
Administrative and General			
Secretary's salary.....	\$ 2,477.05	\$ 4,000.00	\$ 1,522.95
Executive secretary's salary.....	6,000.00	1,000.00	5,000.00
Other office salaries.....	3,383.25	2,506.50	876.75
Office rent	720.00	740.00	20.00
Printing stationery and supplies.....	1,023.76	668.55	355.21
Postage	1,013.91	231.25	782.66
Auditing	248.08	246.38	1.70
Insurance and fidelity bonds.....	186.39	74.26	112.13
Furniture and equipment purchased.....	321.04	143.96	177.08
Moving and storage expense.....	24.00	133.67	109.67
Telephone and telegraph.....	302.18	243.06	59.12
Unclassified	157.44	14.05	143.39
	<u>\$15,857.10</u>	<u>\$10,001.68</u>	<u>\$ 5,855.42</u>
Society Activities			
Council expenses	\$ 2,334.19	\$ 1,621.19	\$ 713.00
Delegates to American Medical Association.....	493.19	485.07	8.12
Secretaries' conference	638.23	443.43	194.80
Traveling expense	1,812.12	812.20	999.92
Reporting annual meeting.....	204.14	227.01	22.87
Publications	626.79	....	626.79
Honorarium	500.00	....	500.00
Memorial plaque	64.72	....	64.72
Sundry society expense.....	545.12	259.44	285.68
	<u>\$ 7,218.50</u>	<u>\$ 3,848.34</u>	<u>\$ 3,370.16</u>
Less excess of income from annual meeting over expenses thereof.....	190.47	693.00	883.47
	<u>\$ 7,028.03</u>	<u>\$ 4,541.34</u>	<u>\$ 2,486.69</u>
Committee Expenses			
Legislative committee	\$ 835.88	\$ 3,543.76	\$ 2,707.88
Post-graduate conference	1,302.75	954.50	348.25
Contribution to Joint Committee on Public Health Education.....	500.00	500.00	....
Economics committee	717.78	724.23	6.45
Maternal welfare committee.....	390.34	103.80	286.54
Public relations committee.....	1,031.01	69.60	961.41
Cancer committee	270.07	378.85	108.78
Preventive medicine committee.....	150.17	241.35	91.18
Goitre committee	100.00	....	100.00
Sundry other committees.....	181.82	4.00	177.82
	<u>\$ 5,479.82</u>	<u>\$ 6,520.09</u>	<u>\$ 1,040.27</u>
Less unexpended portion of contribution in prior year to economics committee..	....	325.51	325.51
	<u>\$ 5,479.82</u>	<u>\$ 6,194.58</u>	<u>\$ 714.76</u>
Journal Expenses			
Editor's salary	\$ 3,000.00	\$ 3,000.00	\$
Editor's expense	600.00	....	600.00
Printing	9,593.73	8,525.79	1,067.94
Reprints	1,147.03	1,409.53	262.50
Discount and commission on advertising sales.....	1,653.00	1,297.92	355.08
Postage	200.00	150.00	50.00
	<u>\$16,193.76</u>	<u>\$14,383.24</u>	<u>\$ 1,810.52</u>
TOTAL	<u>\$44,558.71</u>	<u>\$35,120.84</u>	<u>\$ 9,437.87</u>

SOCIETY ACTIVITY

RECEIPTS AND DISBURSEMENTS—JOINT COMMITTEE ON PUBLIC HEALTH EDUCATION MICHIGAN STATE MEDICAL SOCIETY FISCAL YEAR ENDED DECEMBER 26, 1936

Balance Due Joint Committee—December 29, 1935.....			\$ 998.94
Receipts			
The Detroit News—for articles published.....		\$ 999.96	
Contributions:			
Children's Fund of Michigan.....	\$ 1,500.00		
Michigan State Medical Society.....	500.00		
		<u>2,000.00</u>	
			2,999.96
			<u>\$ 3,998.90</u>
Disbursements			
Salaries:			
Mabel Kelly	\$ 1,200.00		
Herman Rucker, M.D.....	900.00		
Don E. Lyons, M.D.....		\$ 2,100.00	
Expense in connection with "Cancer" booklet published in conjunction with the Cancer Committee of the Michigan State Medical Society.....		108.00	
Miscellaneous		500.00	
		<u>298.89</u>	
			3,006.89
			<u>\$ 992.01</u>

MEDICO-LEGAL DEFENSE FUND MICHIGAN STATE MEDICAL SOCIETY FISCAL YEAR ENDED DECEMBER 26, 1936			
Balance—December 29, 1935.....			\$15,413.24
Disbursements			
Douglas, Barbour, Dusenberg & Purdy—legal services.....	\$ 2,392.04		
William J. Stapleton, Jr.—salary.....	999.96		
Miscellaneous	8.11		
		<u>\$ 3,400.11</u>	
Receipts			
Dues from members.....	\$ 1,866.58		
Interest received	485.63		
		<u>2,352.21</u>	
			1,047.90
Reduction in allowance to reduce securities to quoted market value.....			\$14,365.34
			<u>1,619.50</u>
			\$15,984.84
BALANCE—December 26, 1936.....			
Represented by:			
Securities owned (at quoted market value).....	\$15,211.00		
Balance, included in assets of the general fund.....	773.84		
TOTAL		\$15,984.84	

RECONCILEMENT OF NET WORTH MICHIGAN STATE MEDICAL SOCIETY DECEMBER 26, 1936			
Net Worth—December 26, 1936, as shown by the Society's books.....			\$21,377.81
Deductions			
Unentered liabilities	\$ 2,481.11		
Adjustment of inventory.....	589.66		
Adjustment of accounts receivable and allowance for doubtful accounts.....	77.40		
Undistributed disbursements included in petty cash.....	4.72		
		<u>\$ 3,152.89</u>	
Additions			
Reduction in allowance to reduce securities to quoted market values.....	\$ 1,197.50		
Adjustment to take into income as interest received, value of matured bond coupons which were not cashed at December 26, 1936.....	315.00		
Adjustment of prepaid dues.....	1.50		
		<u>1,514.00</u>	
			1,638.89
NET WORTH—December 26, 1936, as shown by this report.....			<u>\$19,738.92</u>

MINUTES OF MEETING OF LEGISLATIVE COMMITTEE

December 9, 1936

1. *Roll Call.*—The meeting was called to order by Dr. L. G. Christian, Chairman, at 2:30 p. m., in the W. C. M. S. Building, Detroit. Those present: Dr. Christian, Lansing; Drs. A. S. Brunk, Detroit; P. R. Urmston, Bay City; I. W. Greene, Owosso; H. R. Carstens, Detroit; L. Fernald Foster, Bay City; J. H. Dempster, Detroit; Wm. A. Hyland, Grand Rapids; F. B. Burke, Detroit; H. H. Cummings, Ann Arbor; L. J. Gariepy, Detroit; T. K. Gruber, Eloise; M. H. Hoffman, Detroit; Paul Klebba, Detroit; also Executive Secretary Wm. J. Burns. Absent: Drs. P. A. Riley, Jackson, and J. B. Bradley, Eaton Rapids.

2. *Minutes.*—The minutes of the meetings of November 10 and of December 6, 1936, were approved as printed and sent to the members.

3. *Proposed Basic Science Bill.*—The final draft of the proposed Basic Science Bill was studied and slightly amended.

Motion of Drs. Cook-Burke that the bill as amended today be approved and submitted to the Executive Committee of the Council. Carried unanimously.

4. *Plans for 1937.*—The Committee discussed the various important items connected with activity in the ensuing year.

5. *Occupational Diseases.*—The Chairman of the Advisory Committee on Occupational Diseases, Dr. Paul Klebba, reported that Labor will insist on a bill to compensate occupational diseases; sixteen states now have some type of occupational disease law. He gave the attitude of Labor and industry, relative to various types of occupational disease laws, and stated that the medical profession has a large interest in such a proposal. Dr. Klebba suggested that the medical profession should favor some occupational disease bill in which is set up a non-political medical board.

6. *Group Hospitalization.*—The proposed bill of the Michigan Hospital Association was studied by the committee. Motion of Drs. Burke-Hyland that a copy of this proposed bill be sent to all members of the Legislative Committee for further consideration. Carried unanimously.

7. *Adjournment.*—The meeting was adjourned at 5:20 p. m.

MINUTES OF MEETING OF COMMITTEE ON MEDICAL ECONOMICS

December 9, 1936

1. *Roll Call.*—The meeting was called to order at 1:45 p. m., by Chairman Dr. R. H. Pino, in the W.C.M.S. Building, Detroit. Present were: Drs. Pino, Detroit; J. M. Robb, Detroit; C. S. Tarter, Bay City; L. G. Christian, Lansing; Henry Cook, Flint; Harold Miller, Lansing; President Henry E. Perry, Newberry; Secretary L. Fernald Foster, Bay City; S. W. Insley, Detroit; F. E. Reeder, Flint; F. A. Baker, Pontiac; R. G. Tuck, Pontiac. Absent: Dr. C. S. Toshach, Saginaw.

2. *Dr. Pino* outlined the report of Dr. Wm. Haber at hearing of the Governor's Welfare and Relief Study Committee.

He also ran through the agenda to bring all doctors up to date on various subjects.

Item 1—Dr. Haber's report read in full and items commented on by various members present.

The report anticipates \$40,000,000 minimum welfare load in Michigan. It recommended centraliza-

tion of welfare in Lansing, with one agency in each county to look after local details.

Compensation cases discussed—employees cannot waive compensation rights under present law. Suggest change to permit waiving of rights in order that many so-called "unemployables" may be returned to useful occupations.

Item 2—Dr. Insley's report to the Governor's Welfare and Relief Study Commission.

Report read in full—items commented on.

Recommended that full time representative of medicine sit on State Board, to act as administrator only (no diagnosis or treatment). Much discussion on this point as it might affect local county units.

Item 3—Dr. Tuck's report—read in full and items discussed.

Moved by Dr. Insley, seconded by Dr. Tarter that: In view of the material contained in Dr. Haber's address, designated as Exhibit A, and the material of Dr. Insley, designated as Exhibit B, and Dr. Tuck's report, designated as Exhibit C, we hereby recommend to the Executive Committee of Michigan State Medical Society change in the state's welfare laws: (1) Exhibit C as amended.

Recommendation (2). That the state Society's Executive Committee, in coöperation with other allied groups, employ qualified legal talent to draw up proper legislation in connection with the proposed change in the State's Welfare commission.

Recommendation (3). That suitable publicity be employed in furtherance of this program.

Item 4—Report of Special Committee on Evaluation of the Wayne County Medical Service Bureau.

Descriptive articles and a copy of the above report was given to every member of the committee present, to study at his leisure.

Item 5—Discussion of letter from Utah State Medical Society relative to the activity of the Farm Bureau of that state. It appears that the Farm Bureau of Utah is in a mood to demand medical service to all their members. The possible influence of such action, should it spread to all the states, in influencing legislation is something we should take cognizance of. It occurs to the Economics Committee that consideration might well be given to a program to have in readiness in every county with speakers to attend Grange and other farm organization meetings to educate the farmers as to the disadvantages of socialized medicine.

Item 6—Diagnostic clinics. This item only mentioned and held over for further consideration.

R. H. PINO, M.D., *Chairman.*

MINUTES OF MEETING OF ADVISORY COMMITTEE ON POSTGRADUATE EDUCATION

December 9, 1936

The Committee was called to order in the Wayne County Medical Building, Detroit, By Dr. James D. Bruce. Luncheon at 1:00 o'clock. Those attending were: Drs. James D. Bruce, Chairman; Raymond B. Allen, Andrew P. Biddle, C. T. Ekelund, Grover C. Penberthy, R. H. Pino, J. H. Powers, C. C. Slemons, Richard R. Smith, H. H. Cummings. Dr. Cummings acted as secretary. Dr. Henry Cook, Dr. Frank Reeder, and Dr. J. M. Robb sat in with the committee.

The chairman gave a résumé of replies received from practitioners in response to a request for opinions of the 1936 postgraduate series and suggestions for next year. The first 141 replies were studied, with the thought that this would afford a

SOCIETY ACTIVITY

fair cross-section of the large number which are continuing to come in. About 25 per cent of the replies favored changing the lecture period from 10 a. m. until 3 p. m. to 1 until 5 p. m. About 10 per cent favored three speakers instead of two. About 2 per cent favored the exhibition of patients other than in discussions on dermatology. About the same number favored six lecture periods instead of eight. A number favored beginning the course as early as possible in September. The principal reasons given for this were that most of the men had returned from their holidays by early September; that the continuance of the course into late November and, occasionally, December, resulted not infrequently in night driving in returning home; that after the 15th of November, weather conditions were likely to be unfavorable. While this number was not in a majority, it was large enough and the reasons given important enough to warrant careful consideration by the committee.

A number of physicians who had expected to attend regularly, but who by reason of illness or other unavoidable circumstances were unable to complete the required attendance thus forfeiting their right to credit and the lecture series volume, thought they were being unjustly penalized.

The replies to our form letter have been more numerous this year than in previous years, and the comments and suggestions appear to be much more carefully considered. This, as well as the co-operative spirit and the whole-hearted approval of the post graduate program by all, is gratifying.

Dr. Pino expressed the opinion that free clinics would probably be continued throughout the State, and suggested that Dr. Jennings be permitted to continue the study of these clinics in the more populous centers, with the view of suggesting means whereby they might be used for teaching purposes.

Dr. Allen thought it important to continue the instruction in emergency and minor surgery, particularly in fractures. He also proposed the topics of infant feeding and the management of premature infants for next year.

Dr. Smith felt that inasmuch as infant feeding had been dealt with in one of our meetings that it might properly be deferred, at least until other important subjects had been presented. He also expressed the view that in such subjects as gall bladder disease and in peptic ulcer, which may be in the field of internist and surgeon, that both medical and surgical views should be presented.

The subject of endocrinology received general discussion. It was recommended that consideration be given to a review of this field in the coming year. Dr. Allen brought up for discussion, three other subjects, intestinal obstruction, arthritis, and an evaluation of laboratory methods.

Dr. Ekelund suggested the general consideration of cancer and called attention to the splendid symposium offered by Dr. Gould and other members of the profession associated with the Eloise institution.

Dr. Slemons spoke of the great interest of the physicians in the northern part of the lower peninsula in the program on obstetrics, given this autumn by Dr. Alexander M. Campbell and Dr. Norman F. Miller. On account of the short time for arrangements and the necessity for giving these courses before late autumn, there was occasional conflict with the regular postgraduate program. In next year's program, the committee stated that no such conflict would occur.

A request was made from Bay City for Friday instead of Monday. It was suggested that arrangements might be made with the Traverse City-Manistee-Cadillac group for an exchange of days.

A number of men in their replies suggested giving

an examination on the subject-matter of the lecture course as a means of evaluating their progress. The feeling was quite general that such an examination would not prove practical but might be an interesting experiment.

The Northern Michigan Medical Society has forwarded the following suggestions: *First.* Continue the plan of eight meetings a year, with two speakers each day. *Second.* Divide the meetings equally between Cadillac, Manistee, Traverse City and Petoskey. *Third.* Meetings to begin at 1 p. m. and include a dinner at 5 o'clock. *Fourth.* Begin the series as early as possible in September. The members feel that these changes will stimulate attendance.

The method of notification of physicians of these courses was discussed. Notwithstanding every registered physician in the state is mailed from one to two notices about two weeks in advance, and that for one or two months prior to the beginning of the course, notice is given in *THE JOURNAL*, a considerable number of physicians require further notification. It was suggested that the councilor and local secretaries take this matter in hand and see to it that adequate notice come from local areas as well as from the central office.

Summary. There was general agreement upon the content of the 1937 program; also, that the course of eight days, with the present hours, should be continued except in the northern district, where the hours are to be from 1 to 4 p. m.; that Petoskey be added to the Traverse City-Manistee-Cadillac centers, with two days each; that if after beginning the course, a physician be prevented from attending through illness or an unavoidable cause, he receive the lecture series volume upon application, but not be given credit; that Alpena be given four speakers during the winter, the expense of these to be defrayed from State Society funds.

H. H. Cummings, M.D., *Secretary.*

MINUTES OF MEETING OF ADVISORY COMMITTEE ON SYPHILIS CONTROL PROGRAM

December 20, 1936

1. *Roll Call.*—The meeting was called to order in Ann Arbor by Dr. Loren Shaffer, Chairman, at 2:40 p. m. Those present were: Drs. Shaffer, Detroit; R. S. Dixon, Detroit; John Lavan, Grand Rapids; Udo J. Wile, Ann Arbor; also present were: Dr. A. P. Biddle, Detroit; Dr. L. O. Geib, Detroit, Chairman, Preventive Medicine Committee, and Don W. Gudakunst (representing Dr. Henry F. Vaughan, Detroit Commissioner of Health), members of the advisory group to this Committee, Dr. C. K. Valade, Detroit, and Executive Secretary Wm. J. Burns. Absent were: Drs. C. R. Hill, Battle Creek, and Dr. C. C. Slemons, advisor.

2. *Syphilis Control Program.*—The Chair read a letter of November 30 from Surgeon General Thomas Parran, asking each State Committee to "(a) review the available information on the syphilis problem in the state; (b) cooperate in assembling necessary additional information concerning the nature and extent of the facilities which now exist for the diagnosis, treatment, and public health control of syphilis; (c) recommend such supplemental and new state and local facilities and measures as seem desirable in dealing with this infection which is nation wide in its importance and distribution."

The following questions for solution in syphilis control, as forwarded by Dr. Parran, were given individual study and answer as follows:

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- (1) Q. The system of notification most suitable to physicians, patients, and health agencies?
A. We favor *mandatory* notification but it should be in the most simple form. The Federal Government should supply franked envelopes and forms to physicians. We recommend a uniform system for all states. Very simple: name or initials, address, age, sex, state of disease, marital status. Reports should be sent to the State Board of Health, except in those communities requiring local notification.
- (2) Q. The additional laboratory facilities needed for diagnosis of syphilis?
A. (1) We believe the State of Michigan to be adequately provided for the serological diagnosis of syphilis: (a) by state laboratories; (b) by various accredited hospitals; (c) and by the approved private laboratory facilities.
(2) We believe that serological investigation should be available free for all indigent cases. This may be provided, as now by the State Laboratories and by a suggested system of subsidy to recognized approved private laboratories in various parts of the state.
(3) We strongly urge that no single biological test be used to the exclusion of a suitable check, and we further recommend that all hospitals and all private laboratories, as well as the State Laboratories, conduct a serological test with the same methods and the same serological system.
(4) The principle is recommended that the dark field be made more available for the diagnosis of primary syphilis, and that further personnel be trained at recognized centers and used in outlying communities.
- (3) Q. The policy recommended in the distribution of anti-syphilitic drugs?
A. We believe that standard drugs for the treatment of syphilis should be made available, free of charge, to the physicians of the state through the State Department of Health.
- (4) Q. The adequacy of free treatment facilities for those who cannot pay physician's fees?
A. The State of Michigan has not adequate facilities for those who cannot pay physician's fees.
- (5) Q. The nature and extent of the additional facilities needed?
A. We recommend the additional principle of compensating the private physicians for the care of indigent patients on a per visit basis.
- (6) Q. The physician's part in the application of epidemiologic methods for the control of syphilis?
A. The physician is a local epidemiologist as far as the infectious cases under his control are concerned. If he is assured that he will be paid for additional cases found by him, he will locate sources and contacts.
- (7) Q. The possibility of developing minimum standards of treatment of early syphilis?
A. We recommend the principle of minimum standards of treatment for early syphilis, but suggest that such standards be limited to a total grams-grains, administered per time interval.
- (8) Q. The availability of hospital beds for treatment of cases needing hospitalization?
A. Sufficient beds are not available for adequate treatment or control of either early or late syphilis requiring hospitalization.
- (9) Q. Methods for the more adequate prevention of congenital syphilis through recognizing and treating the disease among pregnant women?
A. We recommend an extended educational campaign to physicians to insist on physicians doing routine blood tests early in pregnancy. Where such tests are found to be positive, the expectant mothers are to be treated through the pregnancy according to accepted standards. It is recommended that in the State Birth Certificate there be included the question: "Has a blood test been taken on this woman during her pregnancy?"
- (10) Q. The lines along which informative and educational programs should be conducted?
A. The educational and informative program is in such a state of flux that while we believe that the real control of syphilis lies largely in the correct dissemination of information and in a rational educational program, we have no specific recommendation to make on this point.
- (11) Q. The possibilities of prophylactic measures being taught and administered through physicians' offices, out-patient hospital services and clinics, with the thoroughness and precautions governing Army and Navy procedures.
A. We believe that prophylactic measures may be adequately taught through physicians and various proper agencies. The administration of prophylactic measures through physicians' offices, hospitals and clinics, could only adequately be carried out through 24-hour service. We subscribe to the value of properly carried-out prophylactic measures as a factor of value in the program of prevention.

The above was unanimously approved by the Committee, on motion of Drs. Wile-Lavan.

The Executive Secretary was instructed to send a copy of these minutes to each member of the Committee, to each member of the Executive Committee of The Council and to Surgeon-General Thomas Parran.

3. *Adjournment.*—The meeting was adjourned at 5:50 p. m.

MINUTES OF MEETING OF COMMITTEE ON MATERNAL HEALTH

December 20, 1936

1. A meeting of the Committee on Maternal Health was held at the Hotel Olds, in Lansing, on December 20. The following members of the Committee were present: Dr. Alexander M. Campbell, Chairman; Dr. Norman Miller, Dr. Ward Seeley, Dr. Harold Wiley. Dr. Harold Furlong was absent. Dr. Carroll Palmer, United States Public Health Service, was present and discussed with the Committee some methods of classification and evaluation of the information contained in the obstetric survey blanks and his recommendations were concurred in by the Committee.

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2. Considerable time was spent in considering methods whereby physicians who are dilatory in completing and returning their survey blanks could be encouraged and stimulated to complete them at an early date. It was suggested that Mr. Wm. J. Burns be asked to write the chairman of each Maternal Health Committee of his County Medical Society concerning this matter and that a list be given, indicating the doctors who have not made returns of their blanks. It was revealed that over 7,000 blanks have already been returned and agreed that, inasmuch as Wayne County has received about one-third of the survey blanks sent out, an intensive effort should be made by telephone and personal contact to reach every physician in Wayne County who has not completed his blanks.

3. The Chairman, Dr. Campbell, reported that a tentative budget was asked for and submitted to the Finance Committee of the Council.

4. It was agreed to hold the next meeting in Detroit about the middle of January, 1937.

JOINT MEETING OF COMMITTEE STUDYING FEE SCHEDULES A, B, C AND D WITH LIAISON COMMITTEE WITH HOSPITAL ASSOCIATION AND REPRESENTATIVES OF THE MICHIGAN HOSPITAL ASSOCIATION

January 8, 1937

1. *Roll Call.*—The meeting was called to order by Dr. Grover C. Penberthy at 7:45 p. m., in the Wayne County Medical Society Building, Detroit. Present were—for the Committee Studying Schedules A, B, C, and D: Dr. Penberthy, Dr. E. R. Witwer. For the Liaison Committee: Dr. T. K. Gruber, Dr. H. S. Collisi, Dr. Dean Hart (and Dr. Witwer). For the Hospital Association: Dr. Morrill, Dr. W. L. Babcock, Dr. J. Stuart Hamilton, Dr. W. L. Quennell. Also Chairman of the Council P. R. Urmston, Secretary L. Fernald Foster, Councillor A. S. Brunk, Chairman of the Medical Economics Committee R. H. Pino, and Executive Secretary Wm. J. Burns.

2. *Discussion of Fee Schedules.*—Dr. Penberthy presented the background of actions leading up to the present discussion of Fee Schedules, A, B, C, D, stating that the Crippled Children Commission and the Finance Committee of the State Administrative Board had approved the Fee Schedule revision of the Michigan State Medical Society in all items except the inclusion of the roentgenologists' fee schedules. Dr. Witwer gave the viewpoint of the Michigan Association of Roentgenologists. General discussion brought out the fact that one flaw in presenting arguments to governmental agencies was that the medical group and the hospital group acted independently, which was to the disadvantage of each group. Another point, brought out by Dr. Morrill, was that the whole matter seemed to be dominated by detail men in the Auditor General's office.

Motion of Drs. Collisi-Gruber that a *special joint committee of five, two from the Michigan Hospital Association, two from the Michigan State Medical Society, and one from the Michigan Association of Roentgenologists (appointed by the president of their respective organizations), present the medical and hospital viewpoint toward and the solution of, the Crippled Child, the Afflicted Child and the Afflicted Adult problems to the appropriate State or County governmental agencies to the end that a united stand*

be taken at all times by these three groups in these matters of mutual interest. Carried unanimously.

3. *Michigan Hospital and Medical Service Bureau.*—This proposed clearing-house of papers and red tape connected with the presentation of bills for medical and hospital care of Crippled and Afflicted Children, as proposed by Mr. Marsland, of the Auditor General's office, was discussed by the committees present. It was brought out that bills for hospital as well as medical care are being sent by various hospitals throughout the state at rates less than the fee schedule, and the necessity for publishing the fee schedule and disseminating it to physicians and hospitals was brought out by Secretary Foster. The suggestion that a physician be employed in the Auditor General's office to aid with interpretation of medical statements was also suggested. Dr. Morrill suggested that *one State* agency should be responsible for fee schedules; the present system whereby two or more governmental agencies have joint responsibility is most unsatisfactory. The committees asked that a report of these proceedings be presented to The Council of the Michigan State Medical Society at its Midwinter Meeting.

4. *Adjournment.*—Dr. Penberthy thanked all for their advice and attendance. Dr. Gruber expressed appreciation to the members of his Liaison Committee for coming to this meeting from great distances. The meeting was adjourned at 10:30 p. m.

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BAY COUNTY

A. L. ZILIAK, M.D.
Secretary

The Annual Meeting of the Bay County Medical Society was held at the Wenonah Hotel, Bay City, Michigan, at 6. P. M., December 16, 1936. The complimentary banquet given by retiring president, Dr. M. C. Miller, was preceded by a short business meeting held solely for the purpose of election of officers for the ensuing year, and presentation of reports.

The following officers were elected:

President—Dr. A. D. Allen.
President-elect—Dr. C. L. Hess.
Secretary-Treasurer—Dr. A. L. Ziliak.
Censor—Dr. V. H. Dumond.
Delegate to M.S.M.S.—Dr. R. C. Perkins.
Alternate to M.S.M.S.—Dr. M. C. Miller.
Medico-legal committeeman—Dr. E. A. Witwer.

The attendance was the largest on record for an annual meeting of this society. There were fifty-five members and seventeen guests present. The array of state officers was of sufficient number to do justice to a state meeting. These included:

Dr. Henry Cook, Flint, President-elect M.S.M.S.
Dr. P. R. Urmston, Bay City, Chairman of the Council, M.S.M.S.
Dr. Wm. Hyland, Grand Rapids, Treasurer, M.S.M.S.
Dr. L. Fernald Foster, Bay City, Secretary, M.S.M.S.
Mr. Wm. J. Burns, Lansing, Executive Secretary, M.S.M.S.
Dr. Vernor Moore, Grand Rapids, Councillor.
Dr. Fred B. Burke, Detroit, President-elect, Wayne County Medical Society, and Chairman of the Ethics Committee, M.S.M.S.
Dr. Thos. K. Gruber, Detroit, President Wayne County Medical Society.
Dr. Paul Klebba, Detroit, Chairman of the Committee on Occupational Diseases.
Dr. Verne Wenger, Grand Rapids, Member Public Relations Committee, M.S.M.S.

Open house was held at the home of the host, Dr. Miller, Auburn, Mich., following the banquet.

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CALHOUN COUNTY

WILFRID HAUGHEY, M.D.

Secretary

Meetings

Tuesday, January 5, 1937—First meeting of the Calhoun County Medical Society. Dinner at Post Tavern, 6:30. Meeting, 8:30 P. M. Program by Cancer Committee of the Michigan State Medical Society.

Tuesday, January 12, 1937—Staff meeting, Leila Hospital, 8:20. This is the annual meeting and election of officers. Two movies: Eugenics, Emergencies and Two movies: Empyemias and Action of Ergotate.

Tuesday, January 19, 1937—Staff meeting, 8:15 P. M.

Tuesday, January 26, 1937—Battle Creek Academy of Medicine and Dentistry.

Minutes

The annual meeting was called to order at the Kellogg Hotel at 6:15 p. m., December 1, 1936, by President R. C. Winslow.

By motion of Dr. Melges, seconded by Dr. Brainard, the minutes of the last meeting were adopted as printed in the Bulletin.

Under reports of officers, Dr. Wilfrid Haughey read the secretary and treasurer's annual report.

Several communications were read from state officers regarding Legislative Committee meeting at Lansing, December 6, and Panel Discussion on Economics in Detroit, December 9.

There being no unfinished business, the chair declared the election the next order of business and called for nominations for president. The election proceeded in regular order, the following being nominated as stated and elected unanimously:

President—C. W. Brainard, by Melges and H. M. Lowe.
Vice President—J. E. Rosenfeld, by Melges and Fraser.
Secretary-Treasurer—Wilfrid Haughey, by H. Hansen and Stiefel.

Delegate (2 years)—A. T. Hafford, by H. M. Lowe and Stiefel.
Alternate—William Dugan, by H. Hansen and Sleight.

Dr. Cooper made the election motion in each case, except the last, when Dr. Melges officiated.

A delicious dinner followed the meeting, after which Harlan Cleaveland favored us with several songs accompanied by Mrs. Helen Wiegwick.

Dr. Winslow made his exaugural address, thanking those with whom he has worked for their co-operation and aid, and mentioning several for especial comments. He turned the program over to Dr. Melges, chairman of the Program Committee, who introduced Dr. Ernest O. Melby, Dean of Education, Northwestern University, who talked on "Recent Trends in Education," stressing the growing feeling that the personal touch, the study of the individual, is increasingly important. It is more important that a teacher know how to get along with a pupil than that he know his subject profoundly. He has to live with that child five hours a day, and his success depends on his ability to do so.

There were present thirty-six at the business meeting and ninety-two at the dinner. Several came to hear the lecture.

GENESEE COUNTY

C. W. COLWELL, M.D.

Secretary

OFFICERS, 1936-1937

President—A. Thompson.
President-elect—A. MacArthur.
Secretary—C. W. Colwell.

FEBRUARY, 1937

Treasurer—V. H. Morrissey.

Medico-Legal Officer—H. E. Randall.

Delegates—R. D. Scott, D. Brasie, F. E. Reeder.

Alternate Delegates—D. Wright, D. Kirk, R. S. Halligan.

Counselor—Henry Cook.

The regular meeting of the Genesee County Medical Society, was held at Hurley Hospital on Wednesday, December 16, 1936.

The meeting was called to order by the president, Dr. Alvin Thompson. Minutes of the last meeting were read and approved.

Dr. Malfroid introduced Dr. Smith, who outlined the proposed program to be inaugurated in Genesee County in behalf of Maternal and Infant Welfare, sponsored by the Social Security Act, which was freely discussed by members of the Society.

Dr. Probert reported for the Committee on Preventive Medicine and moved that a list of physicians, willing to do immunization free of charge to those unable to pay, be furnished Dr. Olson immediately, this immunization being necessary for the present time only and possibly for four or five years. It was seconded by Dr. Rundles and passed unanimously.

Meeting adjourned.

GRATIOT-ISABELLA-CLARE COUNTIES

RICHARD L. WAGGONER, M.D.

Secretary

New officers and committees of the Gratiot-Isabella-Clare County Medical Society for 1937 are as follows:

President—Kenneth P. Wolfe, Breckenridge.

President-elect—Phillip R. Johnson, Mt. Pleasant.

Delegate—Myron Becker, Edmore.

Alternate Delegate—A. L. Aldrich, Ithaca.

Committee on Legislation & Public Policy—B. C. Hall, Pompeii; F. C. Dubois, Alma; Wm. R. Harrigan, Mt. Pleasant.

Committee on Annual Physical Examination—R. Wilcox, Alma; M. Budge, Ithaca; J. Sarven, Middleton.

Nominating Committee—A. Aldrich, Ithaca; M. Becker, Edmore; A. Hobbs, St. Louis.

Public Health Committee—L. Davis, Mt. Pleasant; P. Johnson, Mt. Pleasant; M. Faber, Ashley.

Economics Committee—B. Graham, Alma; C. Wood, Clare; C. Baskerville, Mt. Pleasant.

HOUGHTON-KEWEENAW-BARAGA COUNTIES

C. A. COOPER, M.D.

Secretary

The Houghton County Medical Society met at the Douglass House, Houghton, Tuesday, January 5, 1937, for the annual meeting and election of officers.

The meeting was called to order at 8:30 P. M., by president Quick. Seventeen members were present.

Minutes of the previous meeting were read and approved.

The secretary's books were examined by Drs. Sterne and Roche as an auditing committee, and found to be in order.

The following officers were elected:

President—L. E. Coffin, M.D., Painesdale.

Vice President—R. S. Buckland, M.D., Baraga.

Secretary-Treasurer—C. A. Cooper, M.D., Hancock.

Board of Censors for three years—J. R. W. Kirton, Calumet.

Delegate to state convention—J. B. Quick, Laurium, with Dr. A. La Bine, of Houghton, as alternate.

A report on a meeting at Marquette on the proposed basic science law was given by Dr. H. M. Joy. Dr. Manthei also discussed some phases of the proposed law and urged united support.

The meeting adjourned at 10 P. M.

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INGHAM COUNTY

R. J. HIMMELBERGER, M.D.
Secretary

The annual meeting of the Ingham County Medical Society was held at the Hotel Olds, December 15, 1936. There were ninety-one members and guests present. Following the dinner the meeting was called to order by the president, Dr. E. I. Carr. The minutes of the previous meeting, as published in the *Bulletin*, were approved.

The following associate members were elected to membership:

Dr. R. J. Cook, Lansing.
Dr. N. K. McElmurry, Perry, Michigan.
Dr. L. C. Kraft, Leslie, Michigan.

Dr. Carr then presented copies of the proposed legislative bill on the Basic Science law.

The reports of the various committees and the officers were received and placed on file.

Under new business a resolution was presented which provided for a Trust Fund Board. This Board is to have charge of handling the Trust Fund with regard to investments, et cetera. Resolution passed.

The following new officers were elected:

Dr. D. M. Snell, president-elect.
Dr. R. J. Himmelberger, secretary.
Dr. T. I. Bauer, treasurer.
Dr. Harold Miller, medical director.
Dr. L. G. Christian, Dr. C. F. DeVries, Dr. R. L. Finch, delegates.
Dr. J. F. Sander, Dr. P. C. Strauss, Dr. C. D. Keim, alternate delegates.

The Trust Fund Board was elected with their terms of office as follows:

Dr. W. E. McNamara (five years).
Dr. E. I. Carr (four years).
Dr. F. M. Huntley (three years).
Dr. R. J. Morrow (two years).
Dr. B. D. Niles (one year).

Dr. Carr then presented the incoming president, Dr. Milton Shaw, with an engraved gavel. Dr. Shaw responded and as incoming president, took the chair.

There being no further business, the meeting was adjourned.

On January 21, 1937, the Ingham County Medical Society met at the Hotel Olds for the annual Presidents Night dinner in honor of the newly elected president, Dr. Milton Shaw.

There were about 164 members and wives present. During the dinner the members were entertained by several local artists with singing and dancing.

Following the dinner the Society enjoyed itself by dancing to the music of Nate Fry's orchestra.

LIVINGSTON COUNTY

H. L. SIGLER, M.D.
Secretary

Following is the list of officers of the Livingston County Society for 1937:

President—Hollis L. Sigler, Howell.
Secretary-Treasurer—Duncan C. Stephens, Howell.
Delegate—Harry G. Huntington, Howell.
Alternate Delegate—Jesse J. Hendron, Fowlerville.

The various committee members will remain unchanged.

MANISTEE COUNTY

C. L. GRANT, M.D.
Secretary-Treasurer

Manistee County Medical elected the following officers for 1937, at their meeting January 4, 1937:

President—Kathryn Bryan, Manistee.
Vice President—D. A. Jamieson, Arcadia.
Secretary-Treasurer—C. L. Grant, Manistee.
Delegate—E. A. Oakes, Manistee.
Alternate—L. W. Sweitzer, Manistee.

NEWAYGO COUNTY

W. H. BARNUM, M.D.
Secretary

The annual meeting of the Newaygo County Medical Society was held at the Kimbark Inn in Fremont, Dr. and Mrs. Holly of Muskegon and the wives of the members being guests of the Society.

After partaking of a bounteous dinner the meeting was called to order by the president, Dr. Guy Post of the county health unit.

The minutes of the last meeting were read and approved. The society then proceeded to the election of officers for the ensuing year with the result as follows:

President—Dr. A. C. Tompsett, Hesperia.
Vice President—Dr. Lambert Geerling, Fremont.
Secretary-Treasurer—W. H. Barnum, Fremont.
Delegate to M.S.M.S.—Dr. O. D. Stryker, Fremont.

A motion was made, supported and carried that the secretary pay the annual dues from society funds.

At this time Dr. Holly of Muskegon gave a very interesting illustrated lecture on the various types of cancer from the viewpoint of the surgeon and radiologist.

The meeting adjourned.

OAKLAND COUNTY

OTTO BECK, M.D.
Secretary

The election of officers for the year 1937 took place at the meeting held in Pontiac, December 15, 1936. Dinner was served at 6:30 P. M., after which followed the election. The new president-elect is Aaron Riker; secretary, Otto Beck; and treasurer, Hugh Williams. There are two new members of the Board of Directors. R. Y. Z. Aschenbrenner and H. A. St. John, while Loren Sheffield and Howard Barker remain as old members. Ernest Bauer and Clifford Ekelund were appointed delegates.

Dr. Albert C. Furstenberg, the guest speaker for the meeting of January 20, was born in Saginaw, Michigan, May 27, 1890. He received his preliminary education in the Saginaw public schools and his literary training at the University of Michigan, where he was given a B. S. degree. His medical education was also received at the University of Michigan Medical School from which he received his M.D. degree in 1915. The following four years were spent in post graduate study of Otolaryngology. Dr. Furstenberg has written scores of papers on this subject, as well as other phases of medicine. He is now professor of Otolaryngology and Dean of the School of Medicine at the University. He is a member of the American Laryngological Society, the American Otological Society, the Wash-tenaw County and Michigan State Medical Society, and the American Medical Association.

SAGINAW COUNTY

W. K. ANDERSON, M.B.
Secretary

The officers of the Saginaw County Medical Society for 1937 were elected December 17, 1936, as follows:

President—L. C. Harvie.
President-Elect—W. K. Anderson.
Secretary-Treasurer—H. C. Wallace.
Medico-Legal Adviser—W. J. O'Reilly.
Board of Censors—H. J. Meyer, P. S. Windham, and R. S. Jiroch.

MICHIGAN'S DEPARTMENT OF HEALTH

WASHTENAW COUNTY

L. J. JOHNSON, M.D.
Secretary

The Washtenaw County Medical Society held its regular dinner and public meeting at the Michigan Union at 6:00 P. M., December 1, 1936, Dr. Norman F. Miller presiding.

Thirty-one members attended the dinner and meeting.

The minutes of the meeting of December 1, 1936, were approved as printed on the program.

The annual report of the Secretary and Treasurer was presented by Dr. LaFever and was approved and filed.

The Nominating Committee listed the following candidates:

President—Dr. Reed Nesbit.
President-elect—Dr. S. L. LaFever.
Secretary-Treasurer—Dr. L. J. Johnson.
Censor to serve for 3 years—Dr. H. B. Britton.

Motion was made by Dr. Teed and seconded by Dr. Ross that nominations be closed and a unanimous ballot be cast for the four candidates recommended by the Nominating Committee. Carried.

Dr. Miller praised the Public Relations Committee for their time-consuming efforts and inferred that the future of this Committee will be very interesting and of great importance to every member of their Society.

Dr. Miller thanked the members for their attendance and cooperation during the year of 1936.

There being no further business the meeting adjourned at 8:30 P. M.

WEXFORD COUNTY

BENTON A. HOLM, M.D.
Secretary

Officers of the Wexford County Medical Society for 1937, are as follows:

President—Dr. Gregory Moore, Cadillac.
First Vice President—Dr. E. A. McManus, Mesick.
Second Vice President—Dr. John Carrow, Marion.
Secretary-Treasurer—Dr. Benton Holm, Cadillac.
Delegate to State Convention—Dr. W. J. Smith, Cadillac.
Alternate—Dr. John Carrow, Marion.

Success Story—He had tried hard several times, but failed. There had always been some excuse—his youth, appearance, financial status. This time he was determined. There would be no more nonsense.

Brusquely he elbowed his way through dozens of applicants, past private desks, directly into the office of the chief executive.

"Now, look here—" he began. He spoke forcefully, brushing aside all protests.

Ten minutes later, smiling scornfully at the waiting mob, he marched out. At last, he was on relief.
—*Literary Digest*.

The mighty engines of the liner throbbed ceaselessly. The chief engineer wiped a perspiring forehead as he scowled at the pale-faced young man with the oil-can.

"Look here," he growled, "you aren't helping me much with these engines. I understood you knew something about the game."

"So I do," stammered the other, "but on a smaller scale, you know."

"What's your usual job?"

"Watch repairing."—*El Paso World-News*.

FEBRUARY, 1937

MICHIGAN'S DEPARTMENT OF HEALTH

C. C. SLEMONS, M.D., Dr.P.H., Commissioner
LANSING, MICHIGAN

SANILAC AND DICKINSON COUNTIES ORGANIZE HEALTH DEPARTMENTS

Dickinson and Sanilac counties voted in December to organize local full time health departments, thus making a total of twelve counties to provide this service during 1936. More than 300,000 additional persons have been provided with this protection during the past year, and 52.5 per cent of the rural population of the state is now being given full time health service.

The Sanilac health unit is unique in that it will be a demonstration project sponsored by the Children's Fund of Michigan with the aid of state and Social Security Act funds. It will be the first of such departments in the Thumb District of Michigan although 51 other counties in the state are now provided with county or district health departments.

* * *

NUTRITIONAL PROGRAM

Dr. Lillian R. Smith, director, Bureau of Child Hygiene and Public Health Nursing, has announced the development of an educational program in nutrition under the direction of Miss Elizabeth Whipple, B.S. Such a program will be integrated with the bureau's general health education program among both adults and children. Miss Whipple is a graduate of Simmons' College, Boston, served in the University Hospital, Ann Arbor, and comes to the Department from her recent position with the Kent County Welfare Relief Commission.

Department nurses will conduct child care classes during January, February, and March in the following counties: Ionia, Miss Doris Wacker; Houghton, Miss Bessie Bridwell; Washtenaw, Miss Grace Myers; Monroe, Miss Laura Kerr; Saginaw, Miss Iva Robertson; Shiawassee, Miss Bertha Cooper; and Cass, Miss Pauline Jones.

Women's classes are being conducted in Oceana county during January and February by Dr. Pearl Toivonen and in Bay county by Dr. Vida Gordon. Dr. Toivonen will conduct similar classes in Kalamazoo county starting March 1. During March Dr. Gordon will lecture before the county normal training classes.

Nurses assigned to Port Huron to conduct a prenatal nursing program include Mrs. Lydia Tracy, Miss Mary Alton, and Miss Sylvia Krejci. Prenatal work will be conducted in Huron county by Miss Julia Clock; Bay county, Miss Bertha Groth; and Genesee, Miss Martha Giltner.

* * *

VENEREAL DISEASE INSTITUTE

Commissioner C. C. Slemons and Dr. C. D. Barrett, director, Bureau of Communicable Diseases, represented the Michigan Department of Health at the national venereal disease institute called by Surgeon General Thomas Parran at Washington, Dec. 28-30. The institute was called for the purpose of bringing to those interested the most recent information regarding the control and clinical management of syphilis and gonorrhea. State and local venereal disease control officers as well as clinicians and medical instructors were in attendance. Out of this institute there is expected to develop the impetus to successfully carry on the Surgeon General's campaign to stamp out syphilis as a public health menace.

IN MEMORIAM

BIRTHS AND DEATHS IN 1936

Births in Michigan will show a slight decline for 1936 after the unusual rise of the previous year according to present indications. On Nov. 1 there had been recorded 73,369 births compared with 73,761 on the same date in 1935. The 1936 total is not expected to reach the 87,403 births recorded in 1935. This declining birth rate is typical of that throughout the nation.

Total deaths for the state on the basis of unofficial estimates will increase almost seven per cent over the 1935 figures, the greatest increases being shown in deaths from heart disease, cancer, diabetes, apoplexy and nephritis. Deaths from heart disease increased from 7,934 on Nov. 1, 1935, to 8,597 on the same date in 1936. Almost 300 more persons died of cancer this year than last.

Alarming increases were recorded in deaths from pneumonia and automobile accidents. With an increase of 231 deaths during the first ten months, pneumonia continued on its upward trend of recent years. Automobile deaths were running eight per cent ahead of last year's all-time high toll and the final figure will be well over the 1,667 deaths recorded then. The July heat wave accounted for 956 deaths out of the total increase of 3,129 deaths during the first ten months. On Nov. 1 a total of 45,731 deaths from all causes had been recorded, compared with 42,602 on the same date in 1935.

The health of the state generally in 1936 was excellent, with no disease outbreaks of epidemic proportions. Deaths from the communicable diseases such as typhoid fever, diphtheria, whooping cough and tuberculosis continued on their downward trend.

With cancer deaths up seven per cent over 1935 and responsible for one of every ten deaths, the Michigan Department of Health is bending every effort to aid in the intensive state-wide educational campaign to be conducted during 1937 by the Joint Committee on Public Health Education to prevent many of these deaths.

* * *

DIAGNOSTIC LABORATORIES MOVED

Removal of the diagnostic laboratories of the Michigan Department of Health to new quarters will be completed by Jan. 15, it is announced by Commissioner C. C. Slemons. After that date diagnostic service to physicians will continue without interruption from the recently completed modern laboratory located at the State Biologic Plant three miles northwest of Lansing.

Extensive laboratory facilities available in the new \$175,000 three-story structure will make possible greater efficiency and speed of diagnostic service to the health professions of Michigan. Completion of the new laboratory unit gives this state a biologic and diagnostic laboratory service equal to the best.

IN MEMORIAM

Dr. Frederick B. Burke

Dr. Frederick B. Burke, president-elect of the Wayne County Medical Society, died at Harper Hospital, February 2, 1937, of pneumonia, after a little over a week's illness. Dr. Burke would have been installed as president of the society next May. He was born in Milburn, Kentucky, fifty-five years ago, the son of Dr. Thomas W. and Nellie B. Burke. Dr. Burke's father was a native of Ireland. Coming to this country, he practiced medicine for a number of years in Washington, D. C., where he died in 1915.

Dr. Frederick Burke graduated from the Medical Department of Georgetown University in 1906, after which he served his internship in the Washington General Hospital. He located in Detroit in 1909. In 1908, Dr. Burke was married to Louise A. Miller of Washington, D. C. He is survived by his widow and one daughter, Louise.

Dr. Burke practiced as a pediatrician. He held a high place in the estimation of the medical profession. He was called in to many doctors' homes whenever their children were in need of medical care. He might have been called "the doctor's children's doctor." He was for a number of years prominently identified with medical affairs, being an ardent member of the Wayne County and Michigan State Medical Societies, and the American Medical Association. He was a member also of the Detroit Board of Commerce, and took particular interest in civic affairs. For a number of years, Dr. Burke was a member of the Ethics Committee of the Wayne County Medical Society, and up to the time of his election as president-elect, he was chairman of the Ethics Committee. He was aggressive and fearless in everything which he considered right and which he considered in the best interest of organized medicine. He was a member of the Legislative Committee and also chairman of the Ethics Committee of the Michigan State Medical Society. In Dr. Burke's death, both the Wayne County and the Michigan State Medical Societies have lost a valued member.

Dr. Collins H. Johnston

Dr. Collins H. Johnston, of Grand Rapids, died December 29, 1936, of heart disease. He was born in Detroit seventy-seven years ago. He received his early education at Amhurst, Massachusetts, and at Ann Arbor, where he was graduated B.A., and where in 1883 he received the degree M.D. He practiced for three years at Sutton's Bay, which was followed by a year in postgraduate work in New York. In 1887, he located in Grand Rapids, where he practiced the remainder of his life, excepting when he went to Europe for graduate work. He spent a year in post-graduate work in Berlin, Leipsic, Dresden and Prague. Dr. Johnston was a member of a committee which organized the Michigan Tuberculosis Association. He was the association's president in 1913. He held membership in the American Medical Association, the Michigan State Medical Society, the Kent County Medical Society, the American Clinical and Climatological Society, the American College of Physicians; and for many years he was chief of staff of the Blodgett Home for Children. He was also a member of the staff of the Blodgett Memorial Hospital and was secretary of the state medical society for five years. For twenty years he was chairman of the Kent County Medical Milk Commission and was surgeon for the Grand Trunk and New York Central railroads.

Dr. Charles A. Blair

Dr. Charles A. Blair of Morenci, Michigan, died on August 4, while on a visit to his daughter in California. Dr. Blair was born on January 1, 1859, at Smithville, Ontario. He was graduated from the Detroit College of Medicine in 1894. He was valedictorian of his class. Dr. Blair located at Morenci in 1894, where he had practiced up till the time of his last illness. Besides his wife, he is survived by one daughter, Mrs. Helen Blair Thurlby, and two granddaughters, as well as a sister, Mrs. Lillie M. Fisk of Adrian, and one brother, Frank Blair of Morenci.

◆ General News and Announcements ◆

The 100 per cent Club is now composed of three County Medical Societies:

Muskegon County Medical Society
Newaygo County Medical Society
Ontonagon County Medical Society

Each member of the above County Medical Societies has paid his 1937 dues in his County and State Medical Society. Is your County Society paid up 100 per cent?

Dr. H. F. Becker of Battle Creek has also been made a member of the Committee on Medical Economics of the State Society by President Perry.

Dr. R. H. Denham of Grand Rapids spoke to the Allegan County Medical Society on February 2, 1937, on the subject of "Traumatic Surgery."

Your office at 2020 Olds Tower, Lansing, is maintained for your convenience. If you wish a service performed, write the Executive Secretary.

Dr. Z. L. Kaminski of Detroit left the first part of February for a cruise around South America. Dr. Kaminski will return to Detroit the latter part of March.

Dr. Valorus F. Lang, formerly of Manistique, Michigan, has transferred to the Wisconsin State Medical Society. Dr. Lang is now located at 208 E. Wisconsin Ave., Milwaukee.

Dr. A. F. Bliesmer, St. Joseph, features in a story concerning an ancient document in his wife's possession, a log-book of more than 110 years of age from "Old Ironsides."

Shiawassee County Medical Society will entertain officers of the Michigan State Medical Society at a "State Society Night" to be held in Owosso on February 18, 1937.

Dr. Andrew P. Biddle and **Dr. Chas. S. Kennedy** of Detroit were elected President and Secretary respectively at the annual meeting of the Detroit Library Commission on January 5, 1937.

September 27-28-29-30, 1937, are the dates of the Seventy-Second Annual Convention of the Michigan State Medical Society, in Grand Rapids. Get your hotel reservations now.

Dr. Frank L. S. Revnolds, Secretary of the Gogebic County Medical Society is basking in the famous California sunshine. Dr. Mark S. Knapp of Ann Arbor is enjoying the balmy weather of Florida.

A radio talk entitled, "The Truth About Child-birth Fever" was presented by Dr. Harold A. Furlong of Pontiac over Station CKLW on January 5. Dr. Furlong is a member of the State Society Maternal Health Committee.

Dr. M. C. Hubbard of Vestaburg, Michigan, Detroit College of Medicine, Class of 1906, suffered the misfortune of having his right leg amputated on October 13, 1936, because of tuberculosis of the knee.

Dr. Alexander M. Campbell of Grand Rapids gave a talk on Maternal Health to the Junior Board of Blodgett Hospital on Wednesday, January 13th. He presented the film entitled "The Care of the Expectant Mother."

Dr. Alexander M. Campbell, Grand Rapids, Chairman of the Maternal Health Committee of the Michigan State Medical Society, presented a radio talk over station WOOD on Tuesday January 12. His subject was "Prenatal Care."

Copies of "Who Wants Socialized or State Medicine!" are available to members of the Michigan state Medical Society at no cost. Drop a postal card to 2020 Olds Tower, Lansing. Your patients will be interested in this booklet.

The articles and material in THE JOURNAL OF the MICHIGAN STATE MEDICAL SOCIETY are copyrighted. For permission to use or reprint any of the copy contained herein, write the Editor, Dr. James H. Dempster, 5761 Stanton Avenue, Detroit.

The Northwest Medical Conference for 1937 will be held in the Palmer House in Chicago, February 14. Wm. J. Burns, Executive Secretary of the Michigan State Medical Society, will address the group on "The Economic Education of the Medical Student."

Dr. John O. Wetzel of Lansing is the author of an article entitled "Aneurysm of the Internal Carotid Artery with Atrophy and Compression of the Optic Nerves," which appeared in the December, 1936, issue of the *American Journal of Ophthalmology*.

The Midwest Conference on Occupational Disease will be held at the Hotel Statler in Detroit, on May 3-7, inclusive, in conjunction with the annual meetings of the American Association of Industrial Physicians and Surgeons, and Michigan Association of Industrial Physicians and Surgeons.

Dr. R. G. Tuck of Pontiac has been appointed by President Henry E. Perry as Chairman of the Liaison Committee with Dentists, Nurses and Pharmacists, and also as a member of the Committee on Medical Economics of the Michigan State Medical Society.

Dr. H. H. Hammel, well known big game hunter of Tecumseh, Michigan, showed color motion pictures at the Annual Meeting of the Lenawee County Medical Society which he took while hunting chamois in New Zealand last fall. He also showed pictures of his sojourn through the South Seas.

Dr. W. M. Bartlett, Benton Harbor, President of the Twin City Chapter of the National Aeronautic Association, writes an interesting feature on the progress of aviation and a résumé of this organ-

GENERAL NEWS AND ANNOUNCEMENTS

ization's activities during the past year. Dr. Bartlett is Medical Examiner for the U. S. Bureau of Air Commerce.

* * *

The following officers were elected at the Mercy Hospital, Bay City:

Chief of Staff.....Dr. R. N. Sherman
Vice Chief.....Dr. R. E. Scraftford
Secretary.....Dr. F. H. Drummond
Treasurer.....Dr. O. F. Jens

* * *

Does your County Medical Society wish a talk on Preventive Medicine? Cancer? Mental Hygiene? Dermatology? Maternal Health? Medical Economics?

If so, contact the Michigan State Medical Society, 2020 Olds Tower, Lansing—Tel. 5-3355.

* * *

The roster of members of the Washtenaw County Medical Society was published as of January 1, 1937, and contained the names of all the members. The Washtenaw directory gives the name, address and the telephone number of each member. It is worthy of emulation by all County Medical Societies.

* * *

Dr. Henry Vandenberg of Grand Rapids spoke before the Calhoun County Medical Society on Tuesday, January 5, in the Post Tavern. His subject was "The Cancer Program." A round-table discussion on the aspects of Cancer followed Dr. Vandenberg's lecture, which was illustrated with lantern slides.

* * *

A tribute to a physician's horse, who faithfully served Dr. W. L. Wilson, veteran roentgenologist of St. Joseph, for a period of thirty years and a colorful history of Midland, Michigan, written by this favorite old-time physician whose hair has long since turned white, appeared in the New Year's edition of the *News-Palladium*, Benton Harbor's 140-page newspaper. Dr. Wilson's annual contribution is widely read and anticipated each year.

* * *

"Diseases of the Chest and Upper Respiratory Tract" will be discussed at the Second Annual Session of the Postgraduate Institute of the Philadelphia County Medical Society, April 12 to 16, 1937, in Philadelphia. Members of all County Medical Societies are cordially invited to attend. Further information will be furnished by the Executive Office of the Philadelphia County Medical Society, 21st and Spruce Streets, Philadelphia, Pennsylvania.

* * *

Advertising sales in your Journal for 1936 jumped from \$8,051.31 to \$10,048.55, an increase of approximately \$2,000.00. Result: A better JOURNAL for your desk. We thank you for mentioning advertising in THE JOURNAL to the detail men who visit your office. With your continued help, the advertising in THE JOURNAL will be increased another \$2,000.00 in 1937. A better JOURNAL will be ready for your perusal every month.

* * *

A few more of your friends who entered technical exhibits at the Detroit Convention of the State Society, held in September, 1936, included:

Libby, McNeill & Libby, Chicago
The M. & R. Dietetic Laboratories, Inc., Columbus
Mead Johnson & Company, Evansville
The Medical Bureau of Chicago, Chicago
Medical Case History Bureau, New York
The Medical Protective Company, Wheaton, Ill.
The Mennen Company, Newark
Merck & Company, Inc., Rahway, N. J.
Michigan Bandage Company, Detroit
Middlewest Instrument Company, Chicago

Committeemen in Smashes!

On December 6, the automobile of Dr. L. E. Holly of Muskegon turned over on an icy pavement when he was on his way to Lansing for the Legislative Conference. On the same day, Dr. Wm. S. Reveno of Detroit had a smash-up on his way to a meeting of the Public Relations Committee. On January 8, Dr. Dean Hart of St. Johns had a head-on collision while on his way to Detroit to attend a meeting of the Liaison Committee with the Michigan Hospital Association.

* * *

Dr. Harrison S. Collisi was named Chief of Staff of Butterworth Hospital, Grand Rapids, for 1937. Other officers are Dr. Leland M. McKinlay, Vice Chief of Staff; Dr. G. Howard Southwick, Chief of Surgery; Dr. Waldemar B. Mitchell, Vice Chief of Surgery; Dr. J. Clinton Foshee, Chief of Gynecology; Dr. James S. Brotherhood, Chief of Medicine; Dr. Leon C. Bosch, Chief of Obstetrics; Dr. Lorenz J. Schermerhorn, Chief of Pediatrics; Dr. Henry M. Blackburn, Chief of Eye, Ear, Nose and Throat.

* * *

The Centennial of the University of Louisville Medical School

The University of Louisville Medical School is the second oldest medical school now in existence west of the Alleghenys and the oldest municipal medical college in the United States. It celebrates its Centennial March 31 to April 3, 1937, at Louisville, Kentucky. There is an unexcelled clinical program by outstanding guest speakers. Ward rounds daily at the Hospital and lectures in the forenoon and afternoon. There will be numerous scientific exhibits in the various departments of the University.

* * *

SERA Letter No. 274 provides for the payment of mileage at the rate of 25c per mile both ways, after the first three miles, to physicians in the Upper Peninsula as well as to physicians in Alpena, Antrim, Charlevoix, Cheboygan, Emmet, Montmorency, Otsego, Presque Isle, Alcona, Arenac, Benzie, Clare, Crawford, Gladwin, Grand Traverse, Iosco, Kalkaska, Lake Leelanau, Manistee, Mason, Missaukee, Ogemaw, Osceola, Oscoda, Roscommon, Wexford, Oceana, Newaygo, and Mecosta Counties. The above applies to physicians located in the counties listed who render medical service to patients on relief rolls during the months of January, February, March and April.

* * *

Crippled and Afflicted Child Commitments for December, 1936:

Crippled Child: Total of 139.

Of the total number 48 went to University Hospital and 91 went to miscellaneous local hospitals.

From Wayne County (included in above totals): Total cases 50.

Of the 50 cases in Wayne County, 3 went to University Hospital and 47 to miscellaneous local hospitals.

Afflicted Child: Total of 948 cases.

Of the total number 206 went to University Hospital and 742 to miscellaneous local hospitals.

From Wayne County (included in above totals):

Total of 302 cases, of which 33 went to University Hospital and 269 to miscellaneous local hospitals.

* * *

Conference on Occupational Disease in Detroit

The first week in May the Wayne County Medical Society will join with the Michigan State Medical Society, Detroit Department of Health, Michigan Department of Health, Engineering Society of Detroit, and other interested organizations in promot-

GENERAL NEWS AND ANNOUNCEMENTS

ing the Mid-West Conference on Occupational Diseases. All phases of this rapidly developing medico-industrial and medico-legal subject will be discussed. On the Thursday immediately following the conference, joint Annual Meetings of the American Association of Industrial Physicians and Surgeons and the Michigan Association of Industrial Physicians and Surgeons will convene for a two-day session, the program of which will be complementary to the Occupational Disease Conference program. The American Association of Industrial Physicians and Surgeons was organized in Detroit in 1916. It is particularly appropriate that it meet again in Detroit at a time when occupational disease legislation is prominently before the medical profession. All meetings will be held in the Statler Hotel, May 3-7, 1937, inclusive.

* * *

Dr. A. D. MacLaren Honored

The St. Clair County and the Michigan State Medical Society paid tribute to Dr. A. D. MacLaren of Port Huron at a dinner on January 5. The oldest practicing physician in this state, both in age and years of practice, Dr. MacLaren has for more than six decades rendered his services. He was born in 1849 in Halton County, Ontario, and attended the Ralph School of Medicine in Toronto, later completing his training in the Long Island College Hospital, Brooklyn, New York, and the New York Eye and Ear Hospital. Dr. MacLaren served as police commissioner of Port Huron, and for six years was the health officer of the city. He has a deep interest in religious and Y.M.C.A. work.

Honoring Dr. MacLaren at the dinner were Dr. Henry Cook of Flint, president-elect of the Michigan State Medical Society; Dr. A. B. Armsbury and Dr. T. E. DeGurse of Marine City; and Dr. Alex J. MacKenzie, Dr. T. E. Heavenrich, Dr. E. W. Meredith, Dr. George Waters and Probate Judge Clair R. Black, all of Port Huron. Dr. Howard O. Brush, president of the St. Clair County Medical Society, was toastmaster.

* * *

Michigan doctors played an important part in the fifth annual convention of the American Academy of Orthopedic Surgeons in Cleveland, January 11 through 14.

Dr. Carl Egbert Badgley, Professor of Orthopedic Surgery at the University of Michigan, was elected Secretary of the Academy for the ensuing year.

Papers were presented by Doctors Charles W. Peabody, C. Leslie Mitchell and Frederick C. Kidner of Detroit and by Professor Howard B. Lewis of the University of Michigan Department of Biological Chemistry.

Other Michigan physicians in attendance were Drs. W. E. Blodgett, Frank E. Curtis, F. J. Fischer, A. G. Goetz, D. W. Hedrick, H. A. Jarre, A. D. LaFerte, F. H. Purcell, Daniel M. Stiefel and Adolph Schmier of Detroit; C. W. Brainard, Battle Creek; E. R. Elzinga, Marquette; R. J. Fortner, Three Rivers; V. S. Laurin, Muskegon; Felipe Muro, Farmington; T. E. Schmidt, Jackson; and C. H. Snyder, Grand Rapids.

Doctors Schmier and Stiefel were among those doctors admitted to Fellowship in the Academy at the annual banquet in the Hotel Cleveland.

* * *

Medical and public health activities under Social Security in Michigan include:

1. General Health Program (aid to county health units, etc.) Administered by the Michigan Department of Health under the United States Public Health Service—\$280,293 per annum.

2. Maternal and Child Health Program (including refresher courses to physicians having patients in rural areas.) Administered by the Michigan Department of Health under the Children's Bureau of the U. S. Department of Labor—\$114,901.51 per annum.
3. Crippled Children. Administered by the Crippled Children Commission under the Children's Bureau of the U. S. Department of Labor—\$100,000 per annum.
4. Aid to the Blind (including incidental examination by ophthalmologists), administered by the Welfare Department under the U. S. Bureau of Public Assistance—\$64,000 per annum.
5. Child Welfare Service (including incidental examinations by psychiatrists), administered by the Children's Institute at Ann Arbor under the Children's Bureau, U. S. Department of Labor. This is mainly preventive work in rural counties, and includes a traveling unit.

* * *



For circumstances incidental to the placing in position of the tablet, of which this is a photograph, see the January JOURNAL, page 76.

* * *

The Jackson County Medical Society celebrated its second "State Society Night" on Tuesday, January 19, 1937. The series of "State Society Night" was inaugurated by the Jackson County Medical Society on January 21, 1936. Officers and committeemen of the State Society together with members of the Hillsdale County Medical Society and the Jackson County Medical Society enjoyed a very delightful cocktail hour at the Hayes Hotel. Following the dinner, the meeting was opened by Dr. E. D. Crowley, President of the Jackson County Society, who welcomed the guests and turned the meeting over to Dr. Phil Riley, Chairman of the Program Committee. In order that the group might be better acquainted, each one arose to his feet giving his name and home city.

The first speaker to be called upon was Dr. J. Earl McIntyre of Lansing, Councilor of the Second District. Dr. McIntyre remarked briefly concerning the need for a Basic Science Law in Michigan. Dr. Riley then called upon Dr. Frank E. Reeder, of Flint, Speaker of the House of Delegates, for a story, which was forthcoming amid howls of laughter.

President Henry E. Perry of Newberry outlined the legislative problems of the State Society and asked the coöperation of each and every member of the county society to work. If we all work, we will win.

Dr. L. G. Christian, of Lansing, Chairman of the

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Legislative Committee of the State Society, spoke of the hard work of the Legislative Committee and reiterated the need for work and wholehearted cooperation from the men back home.

Chairman of The Council, Dr. P. R. Urmston of Bay City, gave an outline of the work of The Council. Others who spoke briefly were Dr. T. K. Gruber, Eloise, President of the Wayne County Medical Society; Dr. Henry Cook, President-Elect of the State Society; and Bill Burns, Executive Secretary of the State Society.

A highlight of the evening was the presentation of a beautiful scroll appropriately drawn up petitioning the House of Delegates of the State Society to make Dr. D. W. Fenton an honorary Member. Dr. Fenton who resides in Reading, Michigan, is in his 89th year and has practiced medicine for 61 years. He has held many positions of trust in his community and in the Hillsdale County Medical Society. The Jackson County Medical Society also presented a handsome dressing gown. Due to illness Dr. Fenton was unable to be present, and the presentation was made to Dr. B. F. Green of Hillsdale to deliver to Dr. Fenton.

Among those present from out of town who were not called upon for remarks were Drs. R. H. Pino, A. S. Brunk, F. B. Burke, of Detroit; I. W. Greene, Owosso; J. B. Bradley, Eaton Rapids; W. E. Barstow, St. Louis; D. W. Hart, St. Johns; A. G. Sheets, Eaton Rapids; Roy H. Holmes, Muskegon. Also present from Hillsdale County were Drs. O. G. McFarland, North Adams; B. F. Green, A. W. Strom, H. F. Mattson, Chas. T. Bowers, M. H. Bowers, of Hillsdale; W. E. Alleger, Pittsford, President of the Hillsdale County Medical Society; J. S. Stirling, Jerome; L. W. Day, Jonesville. Among those present from Jackson County were Drs. C. D. Munro, G. H. Glover, H. A. Brown, J. B. Meads, G. R. Bullen, R. H. Alter, E. A. Thayer, W. H. Lake, H. M. Chabut, J. W. Wholihan, Ferd. Cox, G. C. Hicks, T. E. Schmidt, W. H. Enders, L. B. Lawton, D. F. Kudner, J. E. Ludwick, W. E. Spicer, A. J. Roberts, H. W. Porter, J. C. Smith, D. P. Philips, J. C. Kugler, H. L. Hurley, J. J. O'Meara, J. D. Van Schoick, Frank Van Schoick, F. F. Pray, J. H. Ahronheim, L. L. Stewart, G. C. Hardie, E. H. Corley, C. Corley, W. A. Wickham, G. A. Seybold, Harry Greenbaum, G. D. Culver, C. R. Dengler, G. M. Baker, P. R. Hungerford, C. E. DeMay, M. D. Wilson, E. S. Peterson, C. F. Hanft, R. E. Newton, M. N. Stewart, W. A. Cochrane, H. F. Balconi, R. M. Cooley, W. L. Foust, M. N. McLaughlin, R. J. Hanna, W. W. Lathrop.

NORTHWEST MEDICAL CONFERENCE

Palmer House
Chicago, Illinois

Sunday, February 14, 1937

8:00 a.m.—BREAKFAST—8:00 a.m.

Informal Discussion. Questions to be written and handed in—assigned to individuals for discussion.

Election of Nominating Committee

Morning Program

9:30 a.m.

President W. F. Braasch, M.D., Rochester, Minnesota, presiding.

Postgraduate and Economic Education

Symposium on Postgraduate Education:

9:30—Report of Survey—R. L. Sensenich, M.D., South Bend, Ind.

9:50—University Courses—Harold S. Diehl, M.D., Dean, University of Minnesota Medical School, Minneapolis, Minnesota.

10:00—Refresher Courses—M. H. Rees, M.D., Dean, University of Colorado School of Medicine, Denver, Colo.

10:10—Formal Local Courses—S. D. Maidon, M.D., Council Bluffs, Iowa.

10:20—Interstate Postgraduate Courses—Jas. D. McCarthy, M.D., Omaha, Nebraska.

10:30—Clinic Courses—Herman H. Riecker, M.D., Ann Arbor, University of Michigan.

10:40—Discussion led by—Ralph R. Wilson, M.D., Kansas City; M. C. Smith, Executive Secretary, Nebraska State Medical Society, Curtis, Nebraska.

Symposium on Medical Economics:

10:55—Economic Education—E. J. Carey, M.D., Dean, Marquette University School of Medicine, Milwaukee, Wisc.

11:15—Economic Education of the Medical Student—Wm. J. Burns, Executive Secretary, Michigan State Medical Society, Lansing, Michigan.

11:25—Economic Education of the Doctor—E. S. Hamilton, M.D., Kankakee, Illinois.

11:35—Discussion led by—C. F. Kemper, M.D., Denver, Colorado; T. F. Thornton, M.D., Waterloo, Iowa.

11:50—Greetings from the American Medical Association—Olin West, M.D., Secretary, Chicago.

12:05—Hospital and Health Insurance—James L. Smith, M.D., Peoria, Illinois.

12:20—Discussion led by—John R. Neal, M.D., Springfield, Illinois; Carl F. Vohs, M.D., St. Louis, Missouri; T. A. Hendricks, Executive Secretary, Indiana State Medical Society, Indianapolis.

Luncheon

12:30 noon

Guests of the Iowa State Medical Society
Remarks by President W. F. Braasch
Election of Officers for 1938.

Afternoon Program

2:00 p.m.

Symposium on Social Security Activities:

2:00—Survey of Activities of State Governments and State Medical Societies—Chas. S. Nelson, Executive Secretary, Ohio State Medical Society, Columbus, Ohio.

2:30—Maternal and Child Welfare—Alfred W. Adson, M.D., Mayo Clinic, Rochester, Minnesota.

2:45—Public Health Services (Resettlement Administration)—A. D. McCannel, M.D., Minot, North Dakota.

3:00—Discussion led by—S. E. Gavin, Fond du Lac, Wisconsin; Elmer G. Balsam, M.D., Billings, Montana.

3:30—Venereal Disease Program—Arthur D. Gray, M.D., Topeka, Kansas.

3:45—Discussion led by—Paul A. O'Leary, M.D., Rochester, Minn.; Earl Whedon, M.D., Sheridan, Wyoming.

4:00—State Boards of Health—Frank Jirka, M.D., Director of Public Health, Springfield, Illinois.

4:15—Discussion led by—Philip Kreuscher, M.D., Chicago, Illinois; J. F. D. Cook, M.D., Langford, South Dakota.

OF GENERAL MEDICAL AND SURGICAL INTEREST

Physiologic Effects of Correction Of Faulty Posture

Louis B. Laplace and Jesse T. Nicholson, Philadelphia (*Journal A. M. A.*, Sept. 26, 1936), state that twenty-six subjects having postural defects of the kypholordotic type were studied with respect to the physiologic changes produced by the correction of their faulty posture. The immediate effects were in general entirely comparable to those observed after one year of corrective exercises. In the corrected posture the diaphragm was not always relatively elevated as is generally believed, nor was the heart always more transversely placed. The diaphragmatic excursions were either increased or decreased, for reasons that are discussed. The vital capacity was generally increased, although flexibility of posture was requisite for optimum results. Oxygen consumption was variable. Pulmonary ventilation was generally increased. Circulatory efficiency, as judged by constancy of blood pressure and pulse rate, was generally improved; in two cases the correction of posture was able to prevent hypostatic congestion and syncope. It was concluded that the results of correcting faulty posture differ widely between individuals, irrespective of the grade of the defect. A correct posture appears to be an appreciable advantage to circulatory and respiratory function in the majority of persons, but in some a postural defect may be a compensatory mechanism which it is inadvisable to disturb. The therapeutic application of postural correction should be made according to the requirements of the individual case and only after an attempt to determine in what posture the individual is functionally most efficient.

Intravenous and Retrograde Urography

In an attempt to compile an up-to-date estimate of the value of intravenous urography, making comparisons with the well established method of cystoscopic (retrograde) urography and treating the subject from the standpoint of the roentgenologist, the urologist and the pathologist, R. E. Cumming and G. E. Chittenden, Detroit (*Journal A. M. A.*, Feb. 22, 1936), prepared a questionnaire, which was mailed to more than 350 active physicians. An accurate summing up of the personal opinions of a great many outstanding men is presented in tabulated form. While the majority of these are urologists, a considerable list of roentgenologists appears in the file of answered questionnaires, and a survey of the opinions of a number of pathologists made as a separate investigation has furnished the background for conclusions representative of the three groups mentioned. The inaccuracies current in the practice of retrograde urography are well known, especially to experienced clinicians who are best able, on the other hand, to interpret the many variations in roentgenograms obtained by the intravenous method. Some roentgenologists seem willing to attempt a complete diagnosis of disorders of the urinary tract without the counsel of a clinician. With the two methods of urography in constant and indiscriminate use, it is more than ever necessary to establish a proper alliance between roentgenologists and clinical

urologists. The correct balance allows primary choice of either method with a willingness to seek confirmation by means of the other. Many individual problems can be solved by one method; in some situations only one can be used. Taking advantage of both and adding the regular practice of multiple or serial exposures at carefully chosen intervals, one may obtain maximal information. Well known dangers of retrograde urography, which formerly were ignored or accepted as unavoidable, are now largely eliminated, so that justifiable fears as to potential renal damage and extension of infection no longer exist. The authors have found no evidence of alarm or of serious consequences verified by pathologists, in connection with the use of the various mediums now employed. Elements of danger present in intravenous urography, which still cannot be ignored, appear in the tables and bear close scrutiny. The variety of answers that the questionnaire has evoked makes one waver between the adoption of intravenous urography to the exclusion of the retrograde method and a wholesale condemnation of the intravenous method and regular use of retrograde urography. This great divergence in opinion show a need for more uniformity in technic with regard to both methods, and a more consistent pooling of information on an unbiased level.

The Relation of Anemia to Pregnancy and Menstruation

The incidence of anemia among normal women of the poor classes in Aberdeen with reference to its relationship to pregnancy and menstruation is reported by Fullerton (*British Med. J.*, Sept. 12, 1936).

The hemoglobin values of 1,534 women were included in the study. When charted by age groups, the non-pregnant women between 15 and 19, at the start of reproductive life, showed an average hemoglobin value of 83% (11.5 g.), 15% below the Price-Jones average for normal women. In the older groups the hemoglobin level progressively decreased reaching the low of 77% (10.6 g.), 21% below normal at age 40 to 44. After the menopause the hemoglobin rose, since the demands for iron were materially decreased.

The values for pregnant women paralleled those for non-pregnant women, but were approximately 5% lower. Although the incidence of anemia in non-pregnant women was less than in pregnant women, the number of severe cases, hemoglobin below 50% (6.9 g.), was greater. Blood examinations and therapeutic iron administration showed that the anemia was clearly attributable to iron-deficiency caused by the low iron content of the diet. Thus both pregnant and non-pregnant women were in negative iron balance throughout reproductive life.

A careful investigation into the total iron demands made in pregnancy by the fetus and tissues, by blood loss at parturition and by lactation showed that in many cases pregnancy did not constitute as great an iron demand as did menstruation. Thus normal menstrual blood loss often produces iron-deficiency, and even in the better classes, profuse menstrual blood loss may lead to hypochromic anemia.

It is concluded that anemia has a high incidence among the poor classes of women caused by a combination of poor diet and iron loss during reproductive life. Menstruation apparently constitutes an iron loss at least as great as pregnancy, and diet is often inadequate to meet the iron demands of either.

THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column and this will be deemed by us a full compensation to those sending them. A selection will be made for review, as expedient.

DISEASES OF INFANCY AND CHILDHOOD. By Wilfrid Sheldon, M.D. (Lond.), F.R.C.P. (Lond.), Physician for Diseases of Children, King's College Hospital; Physician to Outpatients, The Hospital for Sick Children, Great Ormond Street; Consulting Pediatrician to the London County Council; with a foreword by G. F. Still, M.A., M.D., LL.D., F.R.C.P., Emeritus Professor of Children's Diseases, King's College, London. With 137 illustrations. Philadelphia: P. Blakiston's Son & Co., Inc., 1012 Walnut Street, 1936.

This is a text book that covers the subject with a sufficient degree of completeness for the student or the practitioner. The discussions are not too deeply involved with detail, yet, it would appear that nothing of importance had been omitted. The illustrations, while they are not profuse, are good and are advantageously placed, so as to illustrate a point needing illustration.

THE 1936 YEAR BOOK OF GENERAL SURGERY. Edited by Everts A. Graham, A.B., M.D., Professor of Surgery, Washington University School of Medicine; Surgeon-in-Chief of the Barnes Hospital and of the Children's Hospital, St. Louis. The Year Book Publishers, Inc., 304 South Dearborn Street, Chicago. 831 pages, price \$3.00.

This work of over eight hundred pages reviews the literature of the entire field of general surgery for the past year. It would take a lengthy review to do more than enumerate the various subjects discussed. The author has covered the surgical literature very thoroughly. Dr. Graham's standing as a surgeon gives the work especial value to surgeons. The work is well illustrated, an important feature in itself, in a book of this kind. It is strongly commended, not only to surgeons, but to the internist who wishes to keep up with the fast developing science of general surgery.

THE 1936 YEAR BOOK OF GENERAL MEDICINE. Edited by George F. Kick, M.D.; Lawrason Brown, M.D.; George R. Minot, M.D., S.D., F.R.C.P. (Hon.) Edin.; William B. Castle, M.D., A.M., M.D. (Hon.) Utrecht; William D. Stroud, M.D., and George B. Eusterman, M.D. The Year Book Publishers, Inc., 304 South Dearborn Street, Chicago. Pages, 848; price, \$3.00.

A commendable feature of the Year Books bearing the imprint of the Year Book Publishers, Inc., is the high standing of the various authors and collaborators. The roster of authorship of the present volume is a guarantee as to the quality and thoroughness of its contents. Such works call for discerning judgment in evaluation of the current medical magazine literature. Since so much of it is of an ephemeral character, once the selection is made, the art of sifting and condensing it into readable form calls for almost equal judgment. These books cannot be commended too highly to the entire profession inasmuch as the regional specialist even should be interested in the entire perspective of medicine and surgery.

SYNOPSIS OF ANO-RECTAL DISEASES. By Louis J. Hirschman, M.D., F.A.C.S. One hundred seventy-four text illustrations and six colored plates; pages, 288. St. Louis: The C. V. Mosby Company, 1937.

This book is more than a "synopsis" as its modest title suggests; it is a monograph, the viewpoint of a single author who makes himself clear not only in

the inimitable diction by which Dr. Hirschman is so well known as a writer and a speaker, but by illustrations as well. We know of no other book of this size in which illustrations are used so profusely and with such telling effect. A first class picture is worth a thousand words of description. The "Synopsis" is an entirely new work and not a revision of the author's well known Handbook of Diseases of the Rectum, which has gone through four editions since its first appearance in 1909.

Dr. Hirschman reviews the anatomy of the distal portion of the colon, the rectum and the anus, then proceeds to the clinical and surgical aspects of his subject. We have a detailed enumeration and description of the symptoms of ano-rectal diseases, then an interesting chapter on methods of examination of the patient. There are two chapters on anesthesia in which are given full details regarding its technic, with a full account of the limitation of its use. In the first of these chapters, the author describes in detail the method of caudal anesthesia. Then there are chapters on fecal impaction, pruritis ani, anal fissure and ulcer, abscess of the ano-rectal polyposis, proctitis and sigmoiditis, acute and chronic; removal of foreign bodies, benign growths, and anal and rectal prolapse. As mentioned, this work is characteristic of Dr. Hirschman's lecture style, clear, concise, colloquial almost in its presentation. To the numerous medical students, erstwhile medical students, the physicians who have availed themselves of the opportunities for post-graduate courses under Dr. Hirschman, this little monograph is earnestly recommended.

TISSUE IMMUNITY. By R. L. Kahn, M.S., D.Sc. Springfield, Ill.: Charles C. Thomas, 1936.

A long series of original experiments on the various phases of tissue reactions are reported in this text. Each chapter consists of an introductory outline, the experiments bearing on a particular phase of immunity, a summary, a discussion of the clinical significance, and the detailed report of each experiment in table form. The various chapters, eighteen in number, deal with tissues in the non-immune state, the period of incubation, the immune state, the "dis-immune" state, natural and passive immunity, immunity in the young, the specific tissue reaction and antigen and antibodies, etc. The last two chapters deal with the theoretical and practical aspects of tissue immunity. This work on tissue immunity grew out of the author's partially successful attempt to obtain a diagnostic precipitation test for tuberculosis. The problem of tissue reaction in tuberculosis led to other experiments with various proteins and bacteria. Horse serum diphtheria antitoxin was used to measure the rate of diffusion of horse serum from the different tissues during the various phases of immunity. The author states, in the chapter on tissue necrosis occurring in preëxisting inflammatory foci, that inflammation is the defense on the part of the host against invading organisms, while necrosis is the blocking of this defense mechanism by the attacking organism. "Natural" immunity is absent in young animals and is present in adults, as is shown by the failure of the young animal to "anchor" injected streptococci and give a local inflammatory reaction as the adult is able to do. Of all the tissues the skin has the greatest power of "anchoring" antigen or of preventing the spread of bacteria by local inflammation after immunization. In the final chapter on the "Practical aspects of tissue immunity" the relation of the enumerated experiments to various diseases producing tissue immunity is discussed and the need for further investigation stressed. The book closes with a bibliography of forty-five titles and a complete index.